

HOUSES FOR CANADIANS

*A Study of Housing Problems
in the Toronto Area*

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FOREWORD

THIS study arose out of the concern of the Reconstruction Council of Toronto (now the Civic Advisory Council) that there should be careful and impartial examination of the factors which created a serious postwar housing crisis in the city and of ways and means of solving the problem. It was recognized that besides the immediate emergency there was also a chronic problem, towards the solution of which research could make its greatest contribution.

In 1945, at the request of the Reconstruction Council, the School of Social Work of the University of Toronto undertook the responsibility of organizing and sponsoring a series of pertinent housing studies. A three-year programme was projected, to be financed by grants from the City of Toronto, the Ontario Department of Planning and Development, and the Dominion Central Mortgage and Housing Corporation. The School was fortunate in obtaining the services of Mr. Humphrey Carver, who had been a leading Canadian student of housing for many years, to direct these studies. Mr. Carver began his work early in 1946, directly after release from the Canadian Army, with which he had served during the war.

This study, the major result of the programme, will speak for itself. We hope that it will throw a good deal of light on the complex of forces and factors which create a "housing problem" not only in Toronto but also in other Canadian cities. Various other reports have been prepared by Mr. Carver and his assistants, some of which have been published or will be published and others of which have been submitted, through the Civic Advisory Council, to the Mayor and Board of Control of Toronto. During

1948-49 some further work will be undertaken, to complete the original "Toronto Metropolitan Housing Research Project"; and in future the School hopes to make further contributions to the study of housing in Canada and to professional training for housing administration.

I wish to pay tribute to the Civic Advisory Council of Toronto for initiating this enterprise, and for assisting Mr. Carver materially through the advice and encouragement of its Housing Committee; to the City of Toronto, the Ontario Department of Planning and Development, and the Central Mortgage and Housing Corporation for their generous financial support; and to President Sidney Smith and the Board of Governors of the University of Toronto for their recognition of this as an appropriate undertaking for a University School.

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July, 1948

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P R E F A C E

THE post-war development of Canada is proceeding at such a pace that any statistical presentation is obsolete the day it is published. Particularly is this true of housing. The volume of housing production continues to astonish us. So far, in a condition of extraordinary national prosperity, there have been enough purchasers with money in their pockets to keep the house-builders busy. But we cannot expect this to continue indefinitely and meanwhile the miseries of overcrowding do not become any less evident.

In preparing an analytical study of this kind it is necessary to incorporate statistics in order to illustrate the principles involved. Though figures for building costs, shortages, incomes, and volume of housing production fluctuate over a period of months, the fundamental nature of the housing problem remains the same. The principles which are discussed in this study are not therefore invalidated because the illustrative statistics are not the most recent available at the time of publication.

On the subject of housing much has been written in many languages over a period of many years. It might be thought that nothing new remains to be said. And yet in Canada we have hardly begun to attack the real hard core of our housing problem and there is little public understanding of the task before us. Should we not formulate our own solutions to these problems rather than borrow the methods of other countries? To do so, we must know the actual circumstances in Canadian cities and clarify our attitude towards the obvious deficiencies of our housing. What do we want to do about it and whose responsibility is it? In order to answer these questions to our own satisfaction, there must be still more Canadian books on the subject of housing.

Housing problems are of a local character and cannot be realistically expressed in national terms. A discussion of housing becomes somewhat academic unless consideration is given to actual people and actual places. For this reason the main body of statistical material which is employed in this study has been derived from the Greater Toronto area. But the general principles and conclusions are applicable to other metropolitan areas. The material dealing specifically with the Toronto area has been sandwiched between introductory and concluding chapters which are intended to indicate these wider national implications.

At various stages in the preparation of the text advice has been most gratefully received from a number of individuals who have particular knowledge of certain aspects of the subject. It would not be appropriate to name these individuals since they may not wish to be associated with the general conclusions which have been drawn.

Mr. Robert T. Adamson, Research Assistant, made a most important contribution to the preparation of this study. He was largely responsible for the assembling of the statistical material contained in Chapters III and IV and also contributed the rational approach of the economist to the very abbreviated discussion of the housing market in Chapter V. Mrs. A. L. Hopwood, Research Assistant, has been responsible for many details of preparation and proof-reading.

Finally, the author is indebted to Dr. Harry M. Cassidy, Director of the School of Social Work, and his colleagues, for their efforts in making this study possible and for their many helpful suggestions and other contributions during the progress of the work.

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Houses for Canadians

Chapter One: A DECENT HOME FOR EVERY FAMILY

HOUSES, FAMILIES, AND MONEY

ON every continent and in every city families are anxiously looking for better places in which to live. As we approach the middle of the twentieth century the shortage of houses is a world-wide phenomenon.

During the nineteen-thirties the tide of economic insecurity and apprehension discouraged people from building houses and then, for six years, the skills of men were everywhere enlisted for purposes of destruction. But through wars and economic depressions the human race has continued stubbornly to multiply. Now, hungry for an interval of peace and stability, the people start again to build the houses that they must have for the raising of a new generation.

Canada, no less than other countries, has suffered from the diversion of its constructive energies. We are privileged, however, in having emerged from the war with our cities intact. In Great Britain, between 1939 and 1945, 200,000 houses were destroyed and another 250,000 made uninhabitable by enemy action. The U.S.S.R. is said to have lost six million dwellings and the destruction of houses in Germany is beyond calculation. In Canada the unprecedented pressure placed upon our housing accommodation does not originate in the absolute loss of dwellings, but has been brought about by the vigorous growth of the population during a period when the house-building industry has been relatively inactive.

The shortage of houses with which Canada was to be faced after the war was not altogether unforeseen. In 1943 the Dominion

Government appointed the Advisory Committee on Reconstruction, and in March, 1944 a sub-committee produced a 250-page study on the subject of housing and community planning.¹ This historic document, commonly known as the "Curtis Report," after the sub-committee's chairman, forecast the post-war situation in remarkably accurate terms and presented extensive recommendations for housing policy. The authors of the Curtis Report calculated that, if 1946 was to be the first full construction year, it would be necessary for Canada to build at least 731,000 housing units in the following decade; of this number 535,000 should be in urban areas, 71,000 in "non-farm rural areas," and 125,000 should be farm dwellings. The dimensions of this programme have subsequently formed the basis of the federal government's plans. But the Minister of Reconstruction and Supply stated in the House of Commons in July, 1946: "This estimate does not take account of all the doubling-up which we are experiencing and a desirable vacancy rate needed to assure flexibility in our housing supply. If account of these additional factors is taken, we estimate that we should build some 480,000 units during the five years ending March, 1952. About 80,000 units should be built during 1947-48 and 100,000 in each of the following years."

This was a gigantic task for a country which had never before built more than 50,000 housing units in a year and during the ten pre-war years had constructed an average of only 26,000 dwellings a year. In fact in some respects Canada had to embark upon its post-war housing programme at a greater disadvantage than either Great Britain or the United States; for it had allowed its residential construction industry to languish and the production plant and force of building tradesmen had declined far below the normal needs. Between 1921 and 1939 the United States had built

¹Advisory Committee on Reconstruction, Report (IV) *Housing and Community Planning* (Ottawa; March 1944). The report is divided into three parts: the first is a study of housing legislation in Canada, Britain, and the United States; the second part provides the measurements of Canada's housing needs; while the final third outlines the methods by which the programme should be carried out, dealing with the subjects of community planning, home-ownership, subsidized low-rental housing, farm housing, and the organization of the building industry itself.

nearly ten million houses, or the equivalent of 75,000 for each million of its population. In the same period Canada had built 581,000 dwellings or the equivalent of only 50,500 for each million of its population. During these same years Great Britain had accomplished a remarkable achievement, having constructed more than three and a half million dwellings, or the equivalent of 83,000 units for each million of its population. Furthermore, Great Britain had stepped up its production consistently from year to year and reached the peak during the years immediately preceding the war. The peak of Canadian production had been in 1928, after which production dropped to a mere 14,400 units in 1933 and in 1939 was only limping slowly back into full activity. There had been little encouragement for the younger generation to enter the trades and professions associated with such an apparently vulnerable business. The fact is that the skills, arts, and sciences of domestic architecture and community planning had been dormant in Canada for a generation. The process of building houses and planning residential areas was beset with time-worn practices and obsolete conventions, which restricted the development of a national housing programme.

To activate the production of housing the federal government provided the National Housing Act 1944 which superseded the previous legislation in the Dominion Housing Act of 1935 and the National Housing Act of 1938. The two previous acts had been almost entirely concerned with making loans for building houses for private ownership and had been administered by the Department of Finance. On January 1, 1946 the administration of the new act was taken over by the Central Mortgage and Housing Corporation, a federal agency created to provide discounting facilities for the loan and mortgage companies and which now became the control centre from which the nation's housing affairs were to be conducted. Although the C.M.H.C. could not create policy and was limited by the terms of the legislation under which it was to operate, yet it appeared to have wide powers of discretion in influencing the manner in which the whole housing programme would be carried out. For the National Housing Act contained the following provisions:

- (1) Loans to prospective home-owners wishing to build for themselves.
- (2) Loans to assist in the construction of co-operative housing projects.
- (3) Loans to builders who intend to build either for sale or for rental purposes.
- (4) Loans to limited-dividend corporations undertaking the construction of low-rental housing projects.
- (5) Guarantees to life insurance companies investing funds in the construction of low-rental and moderate-rental housing projects.
- (6) Assistance to municipalities collaborating with limited-dividend corporations or life insurance companies in slum-clearance schemes.
- (7) Housing research and community planning.

This variety of provisions suggests the intention of attacking housing needs on a wide front. It has subsequently appeared, however, that those who framed the National Housing Act 1944 were over-optimistic as to the effectiveness of its provisions, particularly those concerned with rental housing.

Canada embarked upon its post-war housing programme in a period of vigorous national development. Through 1945, 1946, and 1947 the number of Canadian families continued to increase at the rate of about 65,000 a year. During these years the production of new houses did little more than keep pace with this increase, leaving the absolute shortage as great as it had been at the end of the war. In 1945, 48,599 housing units were built in Canada, 67,315 in 1946, and about 75,000 in 1947. But the pressure on housing space became more intense as husbands and wives were reunited after wartime separations; many were able to have children for the first time and others were now able to add to their families. In 1945 there were 137,000 children born in urban Canada; in 1946 the number rose to 161,000, and in 1947 to 180,000. As an additional threat overhanging the accomplishment of any housing programme there was now the prospect of large-scale immigration from Britain and Europe; if immigrants

should arrive at the rate of half-a-million a year, as has been forecast recently by a federal minister, all previous calculations of housing need would be eclipsed.

While the country was happy in the vitality of its population, in the increasing demand for its products, and in the envied place which it had won for itself in the society of nations, yet these very circumstances did not create economic conditions in which it was particularly easy to carry out a large housing programme. While the young people of Canada were getting married and seeking homes in which to raise families, the prosperous industrial and business corporations were competing for the services of the construction industry. An expanding nation needs not only houses but also more factories, stores, banks, theatres, and all the other physical equipment with which to operate its resources and maintain employment.

While the production of houses was only moderately accelerated during the post-war years, the competing demands of industry and business were forcibly exerted on the limited supply of materials and skilled labour. This is dramatically shown in the values of building contracts awarded during these years. The annual value of residential contracts remained fairly constant at about \$200 million a year; in fact the total in 1947 was actually a little less than it had been in 1946. But at the same time the building operations of business and industry were being tremendously accelerated; the value of these building contracts rose from \$162 million in 1945 to \$325 million in 1946 and again to \$353 million in 1947.² On every side impressive buildings were to be seen rising from their excavations.

Canadian families who needed housing could observe all around them the confidence with which limited liability companies could assemble money and materials for commercial enterprise. But, with the increasing cost of living and the increasing cost of building, the Canadian family could not feel quite the same confidence in embarking upon the private enterprise of buying a home, with all the complexities and risks attached to such an

²*Building Reporter*. MacLean Building Reports, Ltd. (Toronto).

undertaking. It must be realized that though home-ownership has been advertised as one of the virtuous aims of every Canadian householder, yet in normal times only about one-third of all urban households in Canada have been home-owners.³ The great majority of Canadian families do not expect to have to buy a house, and could not reasonably hope that their financial prospects would justify such a bold commitment.

Unfortunately the construction of housing for rent was one of the forms of commercial enterprise to which not even a limited liability company was attracted. The energy and enterprise of Canadian businessmen, so skilful in financing and organizing large projects, entirely failed to produce the basic requirement of most Canadian families—a house to rent. The one conscientious attempt to establish a national producer of rental housing on an economic basis proved a failure when Housing Enterprises Limited, having produced about 3,000 units, went out of business before the end of 1947. This step-child of the insurance companies could not produce a dwelling in which the average Canadian family could afford to live. However, an important contribution to the housing programme has been the continued operation of Wartime Housing Limited, the agency established by the federal government during the war for accommodating the families of workers who had to be moved near to munitions factories. By this agency 1,556 rental units were completed in 1945, 7,997 in 1946, and about 5,000 in 1947—all of these being reserved for the families of veterans. This is an impressive record for a single agency, representing nearly 7 per cent of the total volume of Canadian housing production in those years. Yet, since Wartime Housing Limited has been virtually the only producer of rental housing, this contribution obviously goes but a small way towards meeting the needs.

Business interests have been unwilling to risk their capital in rental housing because of the greatly increased costs of construction in the post-war period. A rent of \$90 a week would now

³At the time of the 1931 census 63 per cent of households in Canadian cities were tenants and in 1941, 66 per cent of households in the twelve large metropolitan areas were tenants.

be required for space which before the war could have been provided for \$50. Or, conversely, it is now possible to offer little more than half the space that could have been provided for the same rent before the war. Consequently it was to be feared that the owners of such high-cost housing would be the first to lose their tenants whenever the demand for housing accommodation slackened. This situation would be particularly precarious as long as the federal government continued to control the rents of existing housing, maintaining them at little more than their pre-war level. (Based on an index of 100 for the 1935-1939 period, rents had risen only to 112 in 1945 and to 120 by the end of 1947, while in the same period the cost of living index had risen to 146.) Business interests have contended, quite logically, that they could not afford to invest in rental housing as long as this lower level of existing rents threatened to siphon off their tenants as demand slackened. From this it has been argued that all rent controls should be removed in order to stimulate the production of rental housing. It is a nice dilemma. Obviously the removal of rent restrictions would be accompanied by demands for increased wages and this in turn by added costs of production in the familiar spiral of inflation.

INDICES

	1946 AVERAGE	OCTOBER 1947	PER CENT INCREASE OF OCTOBER, 1947 OVER 1946 AVERAGE
*Price of Building Materials	152.5	210.9	38%
*Price of All Commodities	140.9	180.8	28%
*Cost of Living	123.6	142.2	15%
*Rent	112.7	119.9	6.3%
†Average Weekly Earnings	134.5	148.1	10%

The increase in costs of building has been the most dramatic and troublesome feature of Canada's post-war economy. Between 1939 and the end of 1945 the index of materials and labour costs

*From *Housing in Canada*, Central Mortgage and Housing Corporation Quarterly. Base, 1935-1939 = 100.

†From *Labour Gazette* Jan.-Feb., 1948. Base, June 1, 1941 = 100.

had risen from 100 to about 145. But during 1946 and 1947 the price of building materials took a spectacular leap to an index of more than 200, while wage rates in the construction industry rose to 160. Taking into account the factors of both labour and materials the cost of building at the end of 1947 was about 80 per cent higher than it had been in 1939. The costs of new houses have thus come to be out of all proportion to the general price level and to the level of wages (see table on page 9).

Rent-control has protected the householder already in occupation of a house. But more and more houses have been taken out of the rental market as property owners have seized the opportunity to sell whenever a vacancy occurred. To repair this loss of rental units there has been considerable private activity in subdividing existing houses into flats, in addition to which the federal government has had to make financial grants for the creation of "emergency shelter" units at the cost of about four million dollars for 8,400 units. But under the pressure of the housing shortage more and more tenant families have found themselves being thrust into those housing markets whose prices are governed by the cost of building—the markets for new housing both for sale and for rent and the "used housing" market where price levels are ultimately governed also by the cost of building equivalent new units. At no time in the past has a very large proportion of the population been able to enter these markets. The Curtis Committee reported that in 1941 two-thirds of the tenant families in Canadian metropolitan areas had annual incomes of less than \$1,800 and would not have been able therefore to pay more than \$30 a month for housing. Though incomes have risen since 1941 they have not risen, as we have shown above, to the same extent as building costs. It seems evident therefore that there has been no real increase in the proportion of Canadian families that could afford to buy a new house.

When the resources and skills of Canada were released for peace-time activity it was recognized that there must be a stepping-up of housing production to accommodate the increasing working population. Additional housing was required for all economic classes. The National Housing Act 1944 was intended to

provide the means by which housing of many different types could be created by many different kinds of agency drawing capital from many different sources. But under economic circumstances that could not perhaps have been foreseen, the housing programme has not assumed this broad inclusive character. The housing of 1945, 1946, and 1947 has been almost entirely the product of the small-scale builders each offering a few small detached homes for sale.

The optimism of the post-war years, supported by wartime savings, has provided the speculative builders with customers to such an extent that the numerical programme has almost been fulfilled by this means alone. However, the 1947 production of 75,000 housing units has fallen somewhat short of the 80,000 target and with the dissipation of wartime savings, the increased cost of living, and the gathering doubts as to the security of the world in which we earn our national income, it now seems improbable that the target of 100,000 housing units can be reached in 1948 unless other agencies of production can be brought into action.

Impressive though the numerical record of post-war housing production has been, we must admit that its character has fulfilled neither the recommendations of the Curtis Report nor the framework provided in the National Housing Act 1944. There has not been a confident development of new community areas, planned on a generous scale to contain the varieties of accommodation required by the Canadian people. In three years we have scattered nearly 200,000 small homes on the fringes of our cities and towns. The numbers are impressive, but anyone who looks at the new housing areas with a critical judgment must confess that the product of the programme is monotonous, disorganized, and not consistent with the intentions expressed in the documents on which the programme has been based.

THE NATIONAL HOUSING POLICY

As we enter a new period of history, with the housing shortage recognized as our outstanding social problem and the crucial test of our economic and technological skill, it is possible already to

discern a most significant change in the public attitude to these problems. Without such a reorientation it might indeed be impossible either to modernize the process of building houses or to bring about a revival in the arts of domestic architecture and civic planning. This change of public attitude arises from the very nature of the situation in which so many Canadian families have found themselves. The need for better housing accommodation has now been an experience shared by so many in all kinds of circumstances that we have come to think of housing as a matter of public concern requiring some kind of corporate action. Every community has had to make an inventory of its accommodation and has had occasion to appraise its stock of housing with a critical eye. The country's stock of housing has suddenly become a matter of profound personal interest to a very great number of people, for in 1946 the number of dwellings in Canadian cities was about 200,000 less than the number of families and a large proportion of those dwellings was very obviously in need of replacement. Post-war society has examined the housing which it has inherited from a previous generation and has found it to be inadequate both in quantity and quality. The public is therefore keenly interested to know how the necessary additions to the stock are to be made and by what means the process of replacement is to be effected.

This all-inclusive view of the nation's housing affairs provides a new background against which to work out plans for the future. Formerly the building of houses appeared to be a matter which directly concerned only those who could afford to buy a new house. But it has now become apparent that the building of new houses concerns very many more people than those who can actually afford to occupy one. For the great bulk of our existing stock of housing we are indeed indebted to the enterprise and initiative of the original purchasers, but we now perceive that they were but agents in the process of creating the community's stock of housing and that the ownership of a house is but a passing phase in its service to the community. The fact is that more

than half of our urban households do not live in houses that they own and five years is about the average length of time each household stays in a dwelling. Our older houses have now had several generations of use and 60 per cent of all urban housing in Canada is now more than a quarter of a century old and was built according to standards accepted before the first Great War. Each dwelling in a community's stock of housing passes through many ownerships and serves many families during its useful lifetime. As we begin to perceive this process it becomes clear that the community as a whole, on behalf of all its members, has a direct interest in the building up of an adequate quantity of housing and in the achievement of a high quality of design.

This realization of the whole comprehensive range of housing affairs is reflected in the policies of our national and local governments. There is introduced for the first time upon the Canadian scene the concept of a housing "programme," arising out of the need to measure our shortages and deficiencies and the consequent formulation of plans for their rectification. This in turn implies the setting of certain standards of achievements for such a programme. Have we not now come to assume that the provision of a separate dwelling for every family is a national objective? Perhaps there has been no official declaration of such a governmental policy and yet the whole philosophy of the Curtis Report and the subsequent efforts of the Dominion Government to plan a production programme inevitably imply such an intention. And if "a separate dwelling for every family" is accepted as an objective of national policy, does it not then become necessary to define some standards by which to measure the quality of such dwellings? For there would be little effectiveness in a policy which sanctioned the use of an unhealthy slum or shack even if it could be technically described a "separate dwelling." So by an inescapable logic the concept of a housing "programme" leads to an acceptance of the view that such a programme can only be said to have reached fulfilment when every family has been placed in a separate dwelling of decent quality. It then becomes

evident that the critical portion of a nation's housing is in the areas of slums and sub-standard dwellings. It is the ultimate aim of a total housing programme to raise the worst-housed families to that level of decent living which we hope to accomplish for everyone in the Dominion of Canada.

The definition of a nation's ultimate housing objective is an essential preliminary to the provision of the necessary legislation and the establishment of administrative organizations for reaching that objective. The General Housing Bill recently presented to the United States Congress (and commonly known as the Wagner-Ellender-Taft Bill) is described as "A Bill to establish a national housing policy and provide for its execution"; the first few lines of the preamble are as follows:

"The Congress hereby declares that the general welfare and security of the Nation and the health and living standards of its people require a production of residential construction and related community development sufficient to remedy the serious cumulative housing shortage, to eliminate slums and blighted areas, to realise as soon as possible *the goal of a decent home and a suitable living environment for every American family* and to develop and redevelop communities so as to advance the growth and wealth of the Nation."

A somewhat similar expression of aims was made in the British Government's White Paper of March, 1945 setting out the nation's housing programme of the post-war years. Three objectives are stated:

The Government's first objective is to afford a separate dwelling for every family which desires to have one. For this purpose it is estimated that some three quarters of a million dwellings are needed.

The second objective is to provide for the rapid completion of the slum clearance and overcrowding programmes which were already in course of execution before the war. To remove houses already condemned as unfit and to abate overcrowding condemned since 1935, a further half million houses are needed.

The long-term objective of the Government is to secure a progressive improvement in the conditions of housing in respect both of standards of accommodation and of equipment, and to attain this objective by a continuous programme of new building. This continuous programme must

include provision year by year for any increase in the number of separate families, the needs which arise out of redistribution of the population, and the replacement of obsolescent houses.

These categorical statements of housing policy must be compared with the somewhat limited objectives implied in the description of Canada's operating legislation, the National Housing Act 1944 which is described as "An Act to Promote the Construction of New Houses, the Repair and Modernization of Existing Houses, the Improvement of Housing and Living Conditions, and the Expansion of Employment in the Postwar Period."

For some expression of our ultimate objectives we must look to the statements of responsible national leaders. At the Dominion-Provincial Conference on Reconstruction in August, 1945 the Rt. Hon. Louis St. Laurent said: "The objective is to put a well integrated and permanent housing programme into full operation with the least possible delay." With reference to the rental sector of such a programme as projected in the National Housing Act 1944 he said: "the effect of Dominion participation in financing is to produce a substantial reduction in economic rentals . . . nevertheless there will be some for whom the reduced economic rentals are too high. To provide for such cases a limited dividend housing corporation may accept contributions to a rent reduction fund from a provincial government, municipality, social agency, trust or person."⁴

A somewhat similar statement was made in the House of Commons a year later by the Rt. Hon. C. D. Howe:

Adequate housing for the Canadian people is one of the major tasks before us. The utmost effort will be directed towards meeting this need and the resources of the country will be used to this end. . . . It is the policy to ensure that as large a portion as possible of housing be built by private initiative. If, however, with all the assistance we can provide for financing, materials and labour supply, the houses required to substantially improve the housing standard of the Canadian people are not forthcoming, then the Dominion Government will take a direct position in the housing field. . . . We believe that houses should be constructed commensurate with the high standard of living at which we are aiming. This will involve new houses for

⁴Dominion-Provincial Conference on Reconstruction, August 6, 1945. *Report of the Plenary Session No. 1*, p. 68.

families with low income who cannot afford to pay economic rentals. . . . But subsidies to create uneconomic rentals are, in my opinion, a matter for provincial and municipal concern.⁵

The limits of the national government's responsibility have also been defined by Mr. Howe in the following terms:

The Dominion Government recognizes the need of adequate housing as Canada's most pressing social problem and one of the most serious of all public problems. Since housing is a function of property and civil rights, a matter within the jurisdiction of provincial and municipal governments, direct participation by the Dominion in a housing programme is circumscribed. During the war and transition periods, however, the Dominion has entered the housing field directly to build accommodation under its wartime emergency powers. In its proposals to the Dominion-Provincial Conference (August, 1945) the Dominion Government invited the provinces to consider the various aspects of low-rent housing and slum-clearance. In the absence of agreement on Dominion-Provincial relations made at that time, the provisions made in the National Housing Act 1944 respecting low-rent housing, subsidisation of such housing and slum clearance have been allowed to stand unchanged. . . . The hard-core of the problem—low-rent housing—has been barely touched. Until a steady flow of low-rent units is started no Canadian can feel satisfied with what is being accomplished. . . . Meanwhile the Dominion is discharging in full its responsibility for that part of the problem that is the direct result of the war, and is anxious to work out with the Provinces and municipalities a basis for handling the long term problem.⁶

These declarations of policy are important because they reveal the awareness of an ultimate objective. It is conceded by federal ministers that, ultimately, housing legislation must not only offer facilities for the production of houses in the normal economic market but must also create action for making good the deficiencies of production. The federal government has been discreet, however, in not committing itself to a responsibility for those special legislative and financial provisions without which the ultimate housing objectives cannot perhaps be reached. When governments at three levels are soliciting the goodwill of the electorate they must inevitably each seek to avoid financial commitments; in the practical operation of a federal system it is per-

⁵House of Commons Debates, *Official Report*, 1946, p. 3753.

⁶The Rt. Hon. C. D. Howe, "Meeting Canada's Housing Needs" (*Public Affairs*, October, 1947).

haps right that they should do so. For in the last resort the apportionment of the financial load must receive the endorsement of the taxpayers and their judgment in the matter must arise out of an understanding of the real nature of the housing problem.

But are we concerned here simply with a matter of constitutional law? Is it sufficient to say that, jurisdictionally, housing is a matter of property and civil rights and therefore the ultimate responsibilities belong to the provinces? Are we not concerned here with the very basis of our national life, the provision of adequate housing in which to raise the crop of healthy young Canadians on whose mental and physical health the vigour of the nation depends?

At the beginning of this study of housing it is necessary to raise this question of ultimate objectives because, unless these are defined, the problem cannot be clearly presented nor solutions intelligently discussed. To keep supplying enough houses to satisfy the effective demand of those who can afford to occupy new accommodation, either as owners or tenants, is obviously a task of far less magnitude than to supply enough houses to fulfil the needs of every family in the community. The former task may be accomplished through the normal economic functioning of supply and demand. The latter task presents a problem of supply and need, the solution to which must require procedures of an entirely different kind, involving the implementation of policies based on concepts of national health, social justice, and community welfare.

HOUSING AND HEALTH

The reasons for believing that every family and household in the Dominion of Canada should have the opportunity of living in a separate dwelling of reasonable size and character may seem too self-evident to require substantiation. The sciences and arts of civilization have, throughout historical time, been focussed upon the building of towns and cities and homes in which men have thought that they would be able to live a more free and healthy life, insulated against the weather and against disease and

sickness and against the intrusions of other people. The surface of the earth is littered with the ruins of man's successive attempts to build for himself more secure, more comfortable, more labour-saving, and more sanitary places to live in. This seeking after a healthy way of living has always been one of the ulterior objectives and stimulating forces in society. But however reasonable and self-evident this objective may be, some rational explanation seems necessary in order that a national housing policy may be clearly formulated and vigorously executed, not on account of sentiment or some dimly perceived mission but for reasons that can be scientifically demonstrated. What measurable benefit would accrue to the community as a whole as the result of supplying such a volume of good housing that the worst housing could be taken out of circulation?

The simple answer to this question is that a direct relationship exists between health and the physical conditions under which people live. The fundamental reason for regarding housing as a social service requiring governmental direction, is the acceptance by our society of a corporate responsibility for the health of all its members. In one way or another we have come to regard this responsibility as a measure of material self-protection; in order that we should reproduce ourselves and work together effectively as an economic unit we must see that all members of our society are properly fed and decently housed and provided with the modest pleasures and artistic fancies that make life worth living.

It may seem superfluous to elaborate on this theme when so many families in this community are suffering acutely from the humiliations, insecurities, conflicts and all kinds of sickness both mental and physical which accompany a shortage of decent housing accommodation. Though it is not the purpose of this study to catalogue the varieties and amount of ill health which are being originated and intensified by the present housing situation, yet the daily and hourly existence of these human tragedies up and down the streets of Canadian cities must be regarded as the background of all that follows.

To each individual in the families affected the problem is a

personal one. To the mother it is the bitterness of having to bring up children without a home of their own—in a crowded room in someone else's house, without proper equipment, without any apparent prospects of getting established and continually pursued by fears of being evicted. Under such conditions the common minor problems of sickness and family discipline begin to assume fearsome proportions. For the father there is the nagging sense of responsibility for finding an escape from a situation beyond his control and the threat that the failure to establish a home will necessitate a separation of the family. For the children, sensitive to the insecurity and irritations of their parents, there is an urge to escape from home rather than meet disappointments there; particularly for the 'teen-age' children is there a humiliation in the circumstances and an inability to find the privacy so urgently needed for the development of their individualities. It is from such a background that there emerge the manifold health and welfare problems with which the community's social agencies have to deal; these agencies find that the present housing situation is the principal factor in the problems with which they are presented.

It is obvious that a family is likely to be most healthy and happy when it is living in a house that is easy to keep clean, that can be maintained at a desirable temperature, that provides some privacy for each individual and a generally stimulating atmosphere of light and colour. Yet, curiously enough, very little scientific investigation has been directed at these environmental factors in a health programme. There is, however, a gradually accumulating body of evidence of a negative kind, showing that there is a measurable relationship between poor health and poor housing. In the city of Toronto this was first clearly established as long ago as 1934 by the Lieutenant Governor's Committee on Housing Conditions in Toronto and published in what is generally known as the "Bruce Report."⁷ In reviewing the housing problems of this post-war period no apology is needed for recalling this

⁷*Report of the Lieutenant Governor's Committee on Housing Conditions in Toronto* (Toronto, 1934).

important evidence from the nineteen-thirties, which is briefly summarized in Table I. The Bruce Report is an important and classic document which laid the foundation of what may be described as our housing philosophy. It clearly demonstrated the inevitable association of ill health with poor housing. Though much has happened during the intervening decade, though there have been great changes in social and economic conditions, yet the same poor housing is still with us. But now it is overcrowded and even more intensively used.

Similar records have been obtained from many other metropolitan cities in Canada, the United States, and Great Britain, showing that the close relationship between health and housing conditions is a universal phenomenon. It has been demonstrated furthermore that these characteristics of a poorly housed population represent a financial load upon the taxpayers of the whole community since the poor housing areas which require the most expensive health and welfare services contribute the least to the revenue of the municipality. A survey was recently made of the city of Toronto's annual expenses in servicing two districts of approximately equal size, the Regent Park district of inadequate housing, and a typical neighbourhood in the north end of the city; the survey revealed the fact that the Regent Park district cost the city \$95,000 for public services and only returned a revenue of about \$32,000 (a deficit of \$63,000), while the area in north Toronto cost the city less than \$20,000 for public services and returned a revenue of about \$83,000 (representing a net gain of \$63,000).

Now it must be confessed that there is a certain weakness in most statistical presentations offered as evidence that poor housing conditions are really the cause of poor health and other forms of social disability which are a burden to the community at large. It is certainly not difficult to demonstrate that poor health and other expensive pathological characteristics are commonly found in association with poor housing but it is not so easy to prove that they are related as cause and effect. Is it not possible, it is sometimes asked, that the high incidence of mortality, disease, and

delinquency found in slum areas should really be attributed to the general conditions of poverty and incomplete education that characterize those areas? People who cannot afford to pay very much for their housing naturally gravitate into slums and other areas where the lowest rents are charged. Perhaps the same characteristics which make people ineffective in earning a living also render them ineffective in dealing with problems of physical and mental health in their families. It may be argued that this relative ineffectiveness in a certain section of the community would cause about the same morbidity rates whether that particular population were housed in good or in bad conditions. In fact the only way to give scientific proof of the causative relationship between housing and health is to examine the effects of moving a specific group of people out of poor housing conditions into good housing conditions. Unfortunately there has not been an opportunity to conduct such a controlled experiment in Canada and we are therefore compelled to rely upon the evidence of experiments that have been conducted in Great Britain and the United States. Each of these countries has been able to provide well-authenticated studies made in the process of re-housing the populations of slum areas. Each of the four groups whose health records are shown on Table II evidently underwent an improvement as the direct result of the change of environment. It is noticeable, however, in the two English groups studied, that in no case did their health records improve to such an extent that they were raised to the average standard of the whole city. Perhaps the period of observation was not sufficiently long to allow the full benefits of re-housing to take effect. But it may also be allowed that these particular population groups were not as inherently healthy as those in other parts of the city which had enjoyed over the previous years better living conditions of all kinds—nutritional, environmental, educational, and occupational. It is generally conceded that the full benefits of improved housing are not immediately found in the adult population who cannot react immediately to new conditions; the full benefits of good housing are brought to bear on the child population and the real

extent of these benefits could only be properly measured over a lifetime. In this connection it is interesting to observe that studies have recently been made in the United States showing a relationship between poor housing and personality and mental disorders; it was found that army rejection rates for personality defects were one and one half times as great for young men recruited from certain slum areas as compared with men from good housing areas.⁸

The provision of adequate housing is not an end in itself but is to be regarded, rather, as the means of promoting a healthy way of life. The American Public Health Association, through its Committee on the Hygiene of Housing, has enunciated thirty basic requirements of good housing;⁹ these are grouped under four main headings and may be briefly summarized as follows:

- (1) Fundamental Physiological Needs
(Temperature, light, quietness, space);
- (2) Fundamental Psychological Needs
(Privacy, social expression, hygiene, ease of operation);
- (3) Needs for Protection against Contagion
(Sanitation, preservation of food, separate sleeping accommodation);
- (4) Needs for Protection against Accidents
(Sound construction, fireproofing, safety from mechanical and traffic hazards).

Even this brief summary of the relationship between health and housing is sufficient to show that in the promotion of health housing must be regarded as more than mere shelter. The word "shelter," so often used as a synonym for "housing" in the technical literature of the subject, implies nothing more than a preventive attitude and the setting of standards by sanitary engineers. But good housing should provide an environment in which there may take place a positive reaching after better health, both

⁸E. E. Hadley *et al.* "Military Psychiatry, An Ecological Note" (*Psychiatry*, 7; November, 1944.) p. 879.

⁹*Basic Principles of Healthful Housing*, (2nd Ed.) (New York, American Public Health Association, 1941.)

of body and mind; it should provide not only protection but exhilaration.

A seventeenth-century philosopher, Sir Henry Wotton, described the qualities of fine architecture as "Commoditie, Firmnesse and Delight." In other words good domestic architecture (or housing, as we prefer to call it in the arid vocabulary of the twentieth century) should provide the necessary accommodation in a firm or sound structure and, beyond this, should refresh the human appetite for beauty of form and colour. In the achievement of good health the sense of delight is good medicine and cannot be omitted from the context of our housing programmes.

Any attempt to express categorically the characteristics of good housing must give recognition to the wider environment of a residential area. The life of a family does not take place entirely within the four walls of its dwelling; the amenities of the neighbourhood and the social contacts with other families are very much a part of the daily round. In discussing the desirable features of good housing we are concerned not only with the internal arrangements of each dwelling but also with the physical planning of the larger community area. The following analytical description of the characteristics of good housing has therefore been divided into two parts, the dwelling plan and the community plan.

THE CHARACTERISTICS OF GOOD HOUSING

DWELLING PLAN

1. *Protection.* A dwelling must provide shelter from climatic variations and privacy from the intrusions of people. It must be a firm structure of non-inflammable material.

2. *Content.* The spaces within a dwelling must be of sufficient size and must provide separated areas for family living, individual sleeping quarters, and housework in such a way that the normal activities of children, adolescents, and adults do not conflict.

3. *Air and Light.* The air circulating within a dwelling must be pure and must be maintained at a temperature which permits adequate heat loss from the human body. The living areas of a

dwelling should receive direct sunlight. Without undue glare, there should be sufficient general illumination both of daylight and artificial light.

4. *Services.* Water must enter each dwelling without pollution and sewage must be removed without contaminating exposed surfaces. The apparatus for personal hygiene, food storage, meal preparation, and household cleaning must not require undue expenditure of time and effort in operation.

5. *Character.* The place and form of a dwelling must give recognition to the separate identity of each family as a component unit in the community. In the interior of a dwelling there should be provision for the expression of individual tastes in form and colour.

COMMUNITY PLAN

1. *Protection.* A residential neighbourhood should be sheltered from industrial areas and protected against the intrusion of land uses which conflict with its residential character. Arterial traffic should be excluded from residential streets.

2. *Content.* The dwellings within a neighbourhood should not be uniformly of one type but should provide a sufficient variety of accommodation to meet the needs of various family sizes and age groups.

3. *Air and Light.* There must be open spaces easily accessible from all dwellings to provide fresh-air recreation in all seasons. The orientation of dwellings and the space around them must enable sunlight to enter living rooms and provide a reasonably open outlook.

4. *Services.* In addition to the services of streets and the utilities of water, sewerage, light, and power each residential neighbourhood requires a primary school, a community centre, and a group of local stores.

5. *Character.* The layout and focal centre of a residential area should enable the members of that community to identify themselves as a social group enjoying collective responsibility for the amenities of their neighbourhood.

Chapter Two: A PROGRAMME FOR METROPOLITAN TORONTO¹

THE NUMBER OF HOUSES NEEDED

THE first chapter of this study has dealt with the situation in Canada as a whole and with the wide objectives of a national housing programme. The three chapters which now follow are concerned with the particular situation in the Toronto area which is used here as a territory in which to study housing needs in greater detail. The problems which arise in this particular urban area are broadly similar to those which may be found in other large Canadian cities.

Metropolitan Toronto consists of the city itself and the twelve surrounding suburban municipalities. Though the residential areas of the city and its suburbs are continuous and merge into one another, yet there are certain distinctive features of the city's housing accommodation: for, while the suburbs are largely built up with single family dwellings, 60 per cent of the housing within the city itself is in the form of buildings containing more than one dwelling unit. Some of these are apartment houses designed for that purpose, but a great number are the large three- and four-floor houses built early in the century when the average household was twice as large as it is today and required ten or eleven rooms for its accommodation. (At the turn of the century the average Canadian household contained more than five persons; the average size of the Toronto family is now 3.8.) The inheritance of these solid brick houses from a previous generation, many of

¹A more detailed discussion of Toronto's post-war housing shortage and the statistical evidence for the figures used in sections 1 and 2 of this chapter are given in the author's previous report: Humphrey Carver, *How Much Housing Does Greater Toronto Need?* (Toronto Metropolitan Housing Research Project, May, 1946).

them handsome examples of Victorian and Edwardian architecture, has proved invaluable during the recent pressure of the housing shortage. By converting them for the use of two or three or more families the city has been able to absorb an increased population for which no new housing was built. This process has been taking place particularly over the last fifteen years until, room by room, housing accommodation has become saturated.

Between 1930 and 1945 there were 27,815 dwelling units built in the suburban municipalities to house the increase of 103,320 in the population which took place during those years; in other words, a new dwelling was provided for each additional 3.75 persons. But during the same period the population of the city itself increased by 60,278 while only 8,052 new dwelling units were built, or one for each 7.48 persons. From these facts there emerges the picture of an increasingly overcrowded city able to spill its surplus population into the suburban areas only as fast as new housing was constructed there. Overcrowding, up till the end of the war, was confined largely to the city itself and population had moved into the suburban fringe in direct proportion with the amount of accommodation provided there. A study of this situation indicates that at the end of the war there was already an absolute shortage of about 8,000 units in the city.

It was in these already somewhat critical circumstances that there was now unloaded upon the city's overtaxed housing accommodation the entire force of demobilized service men. Between August, 1945 and February, 1946, 24,000 men returned to the city itself and about 12,000 returned to their homes in the suburbs. About half of them were single men who went to live in their parents' homes, about one-fifth of them already had homes and families of their own, a few had no place to go. And about a third of these veterans had wives waiting for them, but because they had been married during the war years, they had never been able to set up homes of their own. To the previous shortage of 8,000 units, there was consequently added a further immediate need for about 10,000 units, making an absolute shortage in the Toronto metropolitan area of about 18,000 housing units.

Though the lack of adequate housing accommodation might be expected to exercise some restraining influence upon the formation of new families, yet the biological urges of nature are hard to restrain and young people are naturally optimistic. In an expansive and confident mood, stimulated by a successful military and industrial participation in the war, it seems inevitable that Canadian cities are going to increase vigorously in population in spite of the inconveniences of inadequate accommodation. During the last census decade (1931-1941) the city's population increased by 4.5 per cent, while the population of the suburban areas increased by 30 per cent. If this rate of growth were to be repeated in the post-war decade a population of 30,000 would be added to the city and nearly 80,000 to the suburban municipalities making a total increase of 110,000. Unless there should be some serious economic collapse or other kind of disaster it seems hardly likely that metropolitan Toronto will fail to grow more rapidly under the present stimulating conditions than it did during the relatively discouraging pre-war years. An increase of 110,000, assuming an average of 3.8 persons per household, would represent the need for 29,000 additional housing units to be constructed during the next ten years. It should be observed, furthermore, that the need for houses is related to the numbers of adults in the population rather than to the total population figures; since present trends in the age composition of the population show a proportionately larger number of adults, it is likely that estimates of the need for housing units will prove to be understated rather than exaggerated. There will probably be a need for a larger number of smaller dwelling units.

If, during the ten post-war years, there were constructed in the Toronto metropolitan area 18,000 dwellings (to make up the housing shortage) and 29,000 dwellings (to provide for the increase of population) then, if our estimates and calculations are correct, there should be approximately one dwelling unit available for each family and household, or about 257,000 units in the whole area. This would not, however, add quite sufficient accommodation. For in any community the number of dwelling units

must exceed the number of households by a reasonable margin in order to provide for flexibility of movement as family groups are redeployed under changing circumstances. There must be an adequate number of vacancies in the stock of housing or else the normal process of movement could not take place. It is commonly regarded as desirable that the vacancy rate for single-family dwellings should be 2 per cent and for apartments 6 per cent. Even if the minimum proportion of vacancies were regarded as adequate it would be necessary to provide 5,000 housing units (2 per cent of 257,000) in addition to the need already estimated, raising the whole ten-year programme to 52,000.

The Toronto metropolitan community is thus faced with the task of constructing houses at the rate of more than 5,000 units a year for at least a ten-year period. This represents a volume of production twice as great as the average 2,400 units a year built during the period 1931-1945. During 1945 3,458 units were completed in the area, in 1946 4,447, and in 1947 4,021. Since this rate is little more than sufficient to keep pace with the growth of the population it is evident that during 1948 and subsequent years the volume of production will have to be greatly intensified.

THE NUMBER OF REPLACEMENTS NEEDED

A community's stock of housing is in a continuous process of deterioration and obsolescence. Houses, like clothes and furniture and cars, not only wear out through continued use and exposure to the weather but also cease to fit the needs of the people as ways of living change. As older houses come into the possession of families whose economic circumstances make it more difficult for them to contribute towards the increasing costs of maintenance, the process of physical deterioration is accelerated. At the same time older houses come to be occupied by families whose ways of living are further removed both in time and social status from those for whom they were originally designed.

The city of Toronto is now entering an age of maturity when its internal parts, constructed half a century ago, no longer meet contemporary requirements. Since the incorporation of the city

in 1836, the community has been busy growing and adding to its total stock of housing accommodation. With the need to start replacing obsolete housing we enter upon an entirely new phase of civic business, requiring procedures for which there are yet no precedents in Canada. The industrial cities of Great Britain reached this stage of maturity some time ago and are therefore further advanced in their experience of replacing obsolete housing. The United States had already started on this process before the war through the instrumentality of the United States Housing Act 1937 and the Federal Public Housing Agency; American cities are now faced with the necessity for extensive measures of urban redevelopment for which new legal and administrative powers are now being formulated.

In the ten-year period since 1936, 1,712 dwellings have been demolished in the city of Toronto, or about 1.15 per cent of all the dwellings in the city. At this rate it would take more than a thousand years to retire the existing stock of housing accommodation in metropolitan Toronto.

Two factors have enabled the city so long to postpone the process of replacement. During the age of steam power the characteristic form of urban growth was internal expansion thrusting out from the core of the city. Almost as fast as the interior residential areas of the city became obsolete they were overtaken by the internal expansion of commerce and industry. The problem of residential replacement largely solved itself as old dwellings were demolished to make way for new commercial buildings or former residences were adapted for business and institutional purposes. This process still continues to some degree along the main mid-town arteries such as Bloor, Bay and College Streets. But, in general, this convenient method of replacement has ceased to be effective because industries are no longer tied to the city's central unloading point for coal and freight. The adult metropolis has germinated new industrial nuclei such as Leaside, Weston, and New Toronto; the flexibility of road transport and electric power have made suburban locations preferable to central sites. The very size of the city has made it more con-

venient for employees to work in these decentralized industrial areas than to travel to the down-town centre or live in the older and more congested neighbourhoods. And so the interior areas, without the spontaneous process of industrial expansion and replacement, have become stagnant; their sombre buildings have become an increasingly embarrassing inheritance with property-owners fighting a strenuous rear-guard action to squeeze out of them the last remaining values. The original home-owners of the last century have long since given place to owners of converted rental housing; in many cases the titular owners have little to do with their properties personally and have placed those declining assets under the impersonal management of real estate firms and trust institutions.

It has been possible also to postpone the systematic process of replacement because the large family homes of a previous generation could be quite conveniently converted into lodging houses, apartments, and duplexes of which a certain stock was required. These houses had been substantially built for the more prolific families of the nineteenth century and their big high-ceilinged rooms certainly had a spaciousness which the modest six-room house of the last three decades has not been able to offer. We may sometimes regret that the bricklayers and stonemasons of that period practised their crafts so conscientiously, for the ponderous Victorian architecture of early Toronto has been too long with us. These awkward mansions have, however, been able to absorb an increase of population during the present crisis so we may perhaps be grateful that their removal was so long postponed.

The 1941 census provided an opportunity for appraising the housing accommodation of the Canadian people. The condition of Toronto housing did not appear in an altogether favourable light, as can be seen in this summary:

(a) Dwellings requiring external repairs.....	18,608
(b) Dwellings that either had no flush toilet or only the shared use of one.....	24,047

(c) Dwellings that either had no bathtub or shower or only the shared use of one....	26,624
Dwellings with condition (a) and/or (b) approximately	37,000
Dwellings with condition (a) and/or (b) or (c) approximately	42,000

Since Toronto is a thriving city containing a large proportion of comparatively modern houses occupied by people with secure incomes it is to be expected that its housing would, as a whole, compare favourably with that of other cities. Measured by the uniform yardstick used in the 1941 census it is evident that many communities have a higher percentage of sub-standard dwellings, notably Quebec City, Edmonton, Regina and Saint John, New Brunswick. But the 42,000 sub-standard dwellings recorded in the Toronto area—nearly 30 per cent of the total stock of housing—reveals the extent of obsolescence and the great dimensions of the replacement task which must ultimately be undertaken. (See Table IV.)

During 1944 the Toronto City Planning Board made a special study of the city's residential areas and classified their condition under four headings: 16 per cent of the residential areas were described as "sound"; 32 per cent of the residential areas were described as "vulnerable"; 50 per cent of the residential areas were described as "declining"; and 2 per cent of the residential areas were described as "blighted." The Planning Board recommended that the "blighted" areas should be entirely rebuilt and pointed specifically to four areas which were designated "Re-development Areas."

	AREA	POPULATION
(1) Regent Park (North)	42.2 acres	3,717
(2) Regent Park (South)	64.7	3,647
(3) Yorkville	41.2	1,601
(4) Trinity Park	52.6	7,569
Total	<hr/> 200.7	<hr/> 16,534

Assuming that the average number of persons in each household within these areas is 4.3 (the average for the city as a whole),

the number of dwelling units required to rehouse this population would be 3,845. The Planning Board recommended that by more economical use of the land the population of these areas could be raised to 20,921 requiring 4,872 units. The first step in this operation has been the approval given by the electorate on January 1, 1947 to the rebuilding of the Regent Park (North) area and the subsequent appointment of the Toronto Housing Authority in May, 1947.

The provision of about 4,000 modern housing units in the "Redevelopment Areas" is, however, only a small part of the process of reconstruction which will have to be planned in order to restrain the continuous process of obsolescence with which the interior parts of the city are threatened and which has already caused 50 per cent of its residential area to be classified as "declining." From these declining areas there is a continual flight to the suburbs which ultimately threatens the financial structure of the whole municipality. It is unthinkable that the solid core of the city can be abandoned to such a wasteful decline. Some have been hopeful that the process of time itself would rectify this tendency towards internal deterioration, but the current history of the big cities on the American continent seems to demonstrate that time aggravates rather than heals this process.

If we were to assume that henceforth Greater Toronto will have to undertake a continuous replacement of dwelling units as they reach the age of about 50 years, then the annual turnover of this operation would have to begin at the rate of about 1,000 units a year increasing to the rate of about 4,000 units a year at the end of a fifty-year period (2 per cent per annum of the present 200,000 dwelling units in the metropolitan area). The devising of legislative and financial machinery for accomplishing this task is undoubtedly going to be one of the major problems of urban government during the coming years. The principal difficulty lies in the fact that it is not sufficient merely to replace individual buildings, even if private investors were willing to sink their money in obsolescent districts. It is the whole character of these neighbourhoods which must be refashioned, for the growth of the

city outwards from its central core has changed the whole function of the internal street system and the availability of open spaces. As the City Planning Board stated in its 1944 report:

These areas require more than mere protective measures for their improvement and the operation of a Zoning By-law cannot alone do more than stabilize existing conditions which are not satisfactory. Living conditions and amenities, open space, freedom from heavy traffic in the streets, etc. have already become serious deficiencies which must be corrected. In order to bring these neighbourhoods up to a desirable standard for urban residential use, both public and private action will be necessary. Public action should of course precede private action, as only by public action can those conditions be treated which will encourage the private individual property owner to act on his own behalf.

The public action required may be of two kinds or two degrees which might be referred to respectively as Remedial Planning and Re-planning.

(1) *Remedial Planning.* Some declining neighbourhoods are not beyond recall and their vitality may be restored without much disturbance of the existing street plans and properties. By minor adaptations of the street system it may be possible to divert through traffic into main arteries and at the same time remove traffic hazards and create additional play areas. By integrating the improvement plans of the school authorities, the Parks' Department, the operation of the zoning by-laws, and the activities of a neighbourhood citizens' association it may be possible to recreate a community and initiate a new spontaneous growth. A programme directed to this end has been proposed by the City Planning Board in a recent message to the people.² The success of such remedial planning would undoubtedly depend upon the vigour with which it was conducted and the recognition and support it was given by citizen groups. Unless the people concerned really *believed* that a neighbourhood could be revitalized it would not be revitalized.

(2) *Re-planning.* Some declining neighbourhoods cannot be brought back to a desirable standard of residential use without a complete re-planning of the properties and some disturbance of

²*The Planning Board Reports to the Citizens*, a four-page leaflet issued in May, 1947.

the street system. These are characteristically in the districts of mixed land use to be found along the borders of main arteries. In Toronto almost the whole area south of Bloor Street between Bay Street and the Don River is in this condition. The act of rebuilding on any single individual property is in itself insufficient to stem the general process of decline. It therefore becomes necessary to assemble blocks of land of such proportions that the reconstructed area would assume an entity and character of its own. For such an operation public action is necessary in order to acquire by expropriation those parcels of land which could not be assembled by private interests. The authority for a municipality in Ontario so to assemble land is granted by the Planning Act 1946.³

For the purpose of a housing project a municipality, with the approval of the Minister, may (a) acquire land within the municipality; (b) hold land heretofore or hereafter acquired within the municipality; or (c) sell, lease or otherwise dispose of land so acquired or held for a nominal or other consideration to any person or governmental authority having power to undertake housing projects.

This provision makes it possible to assemble and re-plan one or more city blocks so that a new residential neighbourhood can be created, unconfined by the previous boundaries of lots and street lines. The assembly and re-planning of such land can be carried out whether the building is to be done by a public housing authority (such as is proposed for the Regent Park and other re-development areas) or whether the housing is to be constructed and operated by private interests. Private developers could not take up such land profitably for housing development unless the cost of land per dwelling unit was marked down to a level comparable with that of land in suburban areas where lots cost from 10 to 15 per cent of the total cost of a dwelling unit. It is argued, however, that the municipality could ultimately profit from such a procedure of land acquisition even if the re-planned site were turned over to private developers for a nominal sum; it is said that the increased revenue which a municipality may derive by

³Statutes of Ontario 1946, chap. 71, sect. 16.

taxing the thus improved values of the land and buildings would ultimately compensate for the initial cost of land acquisition and clearance. This happy outcome would depend, of course, upon the relationship between the cost of acquisition and the economic level of the occupants of the reconstructed area. It certainly seems unlikely that housing tenanted by middle- and low-income families could ever yield a tax revenue sufficient to pay off these costs of acquisition.

At the present time the economics of this process of internal reconstruction is exercising the minds of municipal authorities in every major city on this continent. To date no formula seems to have been conceived which would prevent the community as a whole from having to accept the financial loss that must accompany the redevelopment of obsolescent areas; redevelopment can only take place if there is a marking-down of the values that society has placed upon such land. This must perhaps be regarded as a normal charge for urban depreciation which has been omitted from our municipal bookkeeping during the previous historical period of city expansion. A question arises, however, as to the source of funds for meeting these costs. In the metropolitan community of Toronto there is obviously no logical reason why these costs should be carried by those who happen to hold property within the boundaries of the city itself; such a charge would in fact only create a vicious circle and accelerate the flight to the suburbs which is the original cause of the internal decline. It would be more logical, in fact, to regard this cost of urban redevelopment as part of the price that must be paid for spreading cities widely into marginal suburban land rather than developing their interiors intensively. But in practical terms there is no way in which these costs could now be charged to the whole group of municipalities within the metropolitan area and it is inevitable that contributions must be sought from some senior government. The need for this source of funds is, indeed, already recognized in the National Housing Act 1944, by provisions made specifically for the clearance of slum areas but which, in principle, apply to the larger process of urban redevelopment;⁴ the federal govern-

ment offers to pay half the cost of land acquisition and clearance provided that the land is to be developed "in accordance with an official community plan" and provided the land is sold to a limited dividend housing corporation.

The administrative machinery by which this process of urban re-planning and redevelopment could be operated has yet to be devised. It may be necessary to create a public utility corporation or commission which would have the powers of expropriation and the delegated authority of the municipality to assemble land and dispose of it for housing purposes. Some American cities have already assigned this function to their local public housing authorities and some have created redevelopment commissions for this purpose. This operation of land assemblage should be clearly distinguished both from the planning function of a planning board and the management function of a housing authority.

The administrative problems implicit in a programme of housing replacement have been touched upon briefly here simply in order to indicate the kind of agency which the municipality will have to develop in order to deal with an important phase of its housing programme. More will be said later of the functions of a housing authority of the kind already established in Toronto.

THE DISPOSITION OF NEW HOUSING

Since there is virtually no land still left available for additional residential building within the boundaries of the city of Toronto

⁴National Housing Act 1944, Section 12.

"In order to assist in the clearance, re-planning, re-habilitation and modernization of slum areas or blighted or sub-standard areas in any municipality, the Minister . . . may make grants to a municipality in order to assist in defraying the cost to such municipality of acquiring and clearing, whether by condemnation proceedings or otherwise, an area of land suitable as a location for a low cost or moderate cost rental housing project. . . . No grant made under this section shall exceed one half of the amount by which the cost of acquisition and clearance of the land . . . exceeds the cost at which the land so acquired and cleared is sold . . . for the purpose of constructing thereon a rental housing project, and no grant shall be made under their section unless the remainder of the excess is borne by the municipality or jointly by the municipality and the government of the province in which the municipality is situated."

itself, almost all the additional housing required (as distinct from replacements) will have to be built in the suburban municipalities. There are now about 155,000 housing units in the city and about 56,000 in the suburban areas; the addition of 50,000 units to the suburban municipalities which may take place during the post-war decade will therefore practically double their present accommodation and raise their population to almost two-thirds of that within the city itself. This represents an entirely new balancing of the domestic economy of the whole metropolis and introduces administrative and planning problems on a major scale. The present services, streets, and community plant of the twelve suburban municipalities have to be developed for the reception of a population twice the size of that for which present services exist. There is now little improved and serviced land still available and new capital is required for preparing building land. Recent amendments to the National Housing Act 1944 have been aimed to draw the funds of the insurance companies into this venture.

In the first attempt to visualize the dimensions of the housing shortage and the consequent size of the housing programme which must be planned for the post-war years, great emphasis has been placed upon the *number of houses*. We were told that Canada should produce 80,000 houses in 1947 and 100,000 in subsequent years. We have ourselves calculated that Toronto needs to build about 50,000 additional houses in the next ten years. But these purely quantitative estimates do not convey a proper impression of the operation that has to be planned, for housing is but one element in the composition of a residential community. Simply to scatter 52,000 houses around the circumference of Toronto would not by any means solve the housing problem. For, in order that these households may operate it will be necessary to supply them with streets, sewers, water and power services, schools, shops, recreation areas, and all the other amenities of modern living.

In order that the housing programme may be carried out with the utmost economy it is obviously necessary that houses should

be placed on sites that can be provided with the essential services at the least cost both to the occupants of the houses and to the public in general. Houses placed on outlying or scattered sites that cannot be integrated with the network of urban services represent a wasteful form of development. Unfortunately there is a centrifugal force that continually urges home-builders to build outside the serviced areas of the metropolis; under the pressure of high costs families of modest income are tempted to seek refuge in undeveloped areas where taxes are lower and building regulations are less strict. Both to these families and to the taxpaying public this scattering of sub-standard housing is dangerous. Sooner or later there is bound to come a demand for services to be extended to such scattered sites, and these will have to be provided in a manner that will not follow the most logical and economical plan. Meanwhile the very fact that the area is inadequately serviced and protected means that the owners of such houses possess insecure assets; in times of economic distress they find themselves in a particularly vulnerable position and become the more easily a charge upon the municipality as a whole.

In Ontario some provision has been made for combating this threat of scattered and premature suburban development through the passage of the Planning Act 1946.⁵ By the terms of this statute each subdivision of land for sale as building lots has to receive the approval of the Minister of Planning and Development; a proposed subdivision may be rejected if it is regarded as premature, or if the available utilities and municipal services are not adequate, or if the subdivision does not conform with the official plan for the area prepared by the local planning board. In this way a restraint may be placed upon the most wasteful process of urban development.

It is clear that the "end-product" of a housing programme is not the construction of a specified number of housing units but is the creation of a series of fully functioning communities complete with all their operating services. The task of completing the

⁵Statutes of Ontario, 1946, chap. 71, sect. 25.

housing programme is in fact inseparable from the process of community planning.

The planning boards established by municipalities, under the authority of the Planning Act 1946, thus will have an essential part to play in the development of Greater Toronto's housing programme for it will be their responsibility to designate the areas for development and to determine the designs of the new communities that are to be created. In order to complete the housing programme both as economically as possible and as rapidly as possible the process of production must be planned so that each new residential area may successively come to completion before the next area is opened up and serviced. This "timing" of successive developments is, perhaps, an aspect of community planning to which too little attention has been given. In planning the construction of new communities it is necessary not only to lay out the sites but also to determine the sequence of operations. In this sense community planning is similar to the planning of any other kind of industrial process; it may be compared with the designing of the process by which the component parts of automobiles are delivered to the assembly line in a rational sequence so that the finished products can be brought to completion as economically and rapidly as possible. It has been pointed out above that the "finished product" of housing production is not the individual house but the operating community.

What is a community?

In the contemporary conception of town-planning a great city such as Toronto consists of a number of neighbourhood communities each of which may be regarded as a distinct social organism. In its 1944 Report the Toronto City Planning Board described a neighbourhood as "a more or less homogeneous area large enough to function as a social unit and not too small to stand on its own feet, with well-defined boundaries such as main roads, railways, ravines etc. . . ." It is true that in the existing built-up city these neighbourhoods are not always very clearly defined; they overlap and merge into one another. But the Planning Board was able to identify seventy-eight neighbourhoods within the

city boundaries, varying in size from 150 to 330 acres with an average of about 250 acres. In the older parts of the city there were found to be from 60 to 100 persons per acre—or a population of about 20,000 in a 250 acre neighbourhood. In that more modern part of the city which lies north of the Canadian Pacific Railway North Toronto line there were found to be from 30 to 60 persons per acre—or a population of 7,500 to 15,000 in a 250 acre neighbourhood.

If the density of development in North Toronto, the most modern section of the city, may be regarded as a reasonable standard, then we may aim to achieve a similar standard in the development of the present housing programme. To produce 50,000 houses may therefore be regarded as a community planning programme for the creation of about twenty-five neighbourhood communities, each containing a population of about 7,500 people living in about 2,000 housing units (3.75 persons per household). Since, however, a considerable proportion of the programme will be absorbed by the filling out of existing incomplete neighbourhood areas it would perhaps be safer to state that twenty (and not twenty-five) new neighbourhood units are required.

A good deal of study of community organization has in recent years been directed towards determining the most desirable size of an operating residential unit or neighbourhood. About 2,000 households appear to provide a well-balanced community. This number of households normally contains about the number of children required to support a school of manageable proportions and buys enough to keep a diversified group of retail stores in business. It is big enough to require its own recreation area and not so big as to make its own shops, schools, and other community services too distant from any house in the neighbourhood.

With its population of 660,000 the city of Toronto has 85 public schools (one per 7,764 population) and 16 secondary schools (one per 41,250 population). On this basis the school district conforms very conveniently with the suggested size of a neighbourhood. Each new community with a population of about 7,500 will

require one public school and a secondary will have to be provided for each group of five neighbourhoods. In all, therefore, the 50,000 unit post-war housing programme implies the need for 25 public schools and 5 secondary schools.

While it is generally agreed that the provision of open spaces has been inadequate in the built-up area of the city there is no absolute standard to determine the proportion of residential land which should be dedicated as permanent open space. In its 1943 Report the Toronto City Planning Board presented some proposals for acceptable standards on the basis of which it may be calculated that residential areas containing 50,000 houses should be provided with about 320 acres of open space. Each neighbourhood should have at least three acres developed as playgrounds for children of pre-school and school age. Five open spaces each of about thirty acres should be developed as playfields to serve the young people in a group of neighbourhoods. And in addition to these spaces planned for active recreation there should be a reasonable contribution, perhaps 100 acres, towards the general park system of the metropolitan area, preferably as an integral part of a continuous inner green belt connected with the ravines and natural landscape areas of the Don and Humber river systems.

Each neighbourhood requires the service of a number of retail stores. It has been the practice in the Toronto area to devote the frontage of main traffic arteries to commercial use though this may have little relation either to the convenient accessibility of these areas or to the amount of retail business that can be supported by a neighbourhood or group of neighbourhoods. In the zoning of land use within the new residential areas the local planning boards will need to make a more precise study of these retail requirements. It seems probable that a community of 2,000 households can be quite adequately served by about forty stores which would require about five acres of land or frontage of about 1,400 feet. Considerations of traffic movement and convenient distribution of these little shopping centres will recommend that they should not be strung along traffic arteries but should be located

in compact groups at strategic points. In all, not more than 125 acres of land should be required for this purpose.

In addition to these specific requirements other features of residential communities will suggest themselves. Neighbourhood theatres and churches must be allowed for and there will be a need for sites for a few light industries to provide local employment apart from the areas specifically zoned for industrial use.

The disposition of the new housing to be built in the Toronto metropolitan area rests with the local planning boards under the general coordination of the Metropolitan Planning Board.⁶ It is only necessary here to point out that the effective assembly of 50,000 housing units so that they form a series of distinct operating communities each complete with its local services and amenities, is an essential part of the planning of the housing programme. The public should be able to see these new neighbourhood communities clearly defined on the plans published and exhibited by the Metropolitan Planning Board and should be able to see each designed community in turn progressing towards completion. So far the only suburban municipalities which have attempted to formulate such plans are the townships of Etobicoke and North York; it is greatly to be hoped that this process will be extended and supported by strong zoning and subdivision controls before post-war building has got any further out of hand.

Community planning is a technical procedure requiring the authority of legislation in order that the uses of land may be controlled for the public good. Though Ontario municipalities are fortunate in the possession of a Provincial Planning Act which gives them a considerable degree of authority over urban development, yet it must be said that the whole process of community planning is still in an early stage of maturity. The outstanding problem is that the type of official plan which is entitled to receive legislative authority takes the form of a zoning map. The effort to simplify the zones of land use leads to the definition of large areas each of which may be developed uniformly for industry, for business or for some particular kind of housing—

⁶At present operating under the title of The Toronto and York Planning Board.

single-family houses or multiple dwellings. Though this procedure is familiar and comparatively simple, yet it does not lend itself to the organic development of neighbourhood patterns. The design of a neighbourhood, containing a variety of dwelling types and a variety of other buildings required to serve the community, cannot be effectively expressed on a zoning map; there is, in fact, a real danger that zoning control will in itself merely impose a sterile uniformity upon residential areas. If urban development is to take the form of planned neighbourhoods it will be necessary to achieve a much closer coordination between the technical staffs of planning boards and the actual developers of suburban property, whether they may be private persons or public agencies.

The objectives of community planning have been referred to here in their application to the suburban fringe of the city. The same objectives of neighbourhood design are to be sought also in the redevelopment of the city's interior parts. Toronto's City Planning Board has already identified seventy-eight neighbourhoods within the boundaries of the city and is committed to a policy of protecting them against intruding traffic and land uses and emphasizing their identity in the gradual processes of civic improvement.

If future generations are to enjoy the benefits of a city which is economical to operate, is not continually threatened with internal decay, and which offers some of the delights of civilized living, we must in this generation exert all our efforts to improve the quality of the housing areas which are now spreading around our great cities without form or design.

THE LACK OF RENTAL HOUSING

There has been an increasing volume of housing production in the Toronto metropolitan area during the last sixteen years as the country has emerged from the economic depression. There was a continuous increase of production from 1932 until 1941, followed by a withdrawal during 1942, 1943, and 1944. (See Table V.) In 1945 residential construction returned to its 1941 scale with the completion of 3,533 units followed by the pro-

duction of 4,447 units in 1946 and 4,021 in 1947. The slight decline during 1947 suggests that the peak of production under present conditions of costs and incomes has now perhaps been passed; unless some new element is introduced into the housing programme, production is likely to decline to a volume considerably lower than is required to fill the continuing needs of the community. This might mean that production would stabilize itself at a volume sufficient to accommodate the annual increase of population but might not succeed in making good the remaining shortage or in taking obsolete housing out of circulation.

The indication of a future decline in residential construction may be attributed to a variety of causes. The most evident reason is, of course, the buyers' resistance to the continued increase of building costs coupled with the dissipation of wartime savings on the increased cost of living. The costs of building materials are compared with the costs of living in Table VI. At the end of the war the cost of living index was 120.3 and the building materials index 144.4; but by October, 1947 the cost of living had risen to 142.2 while building materials had risen as high as 210.9. By the end of 1947 the weighted index of materials and labour had reached a level of 178; it must be said, however, that in spite of this continued rise in building costs indices there are now some indications of improvement. It has been observed by the Central Mortgage and Housing Corporation that "comparable houses built for sale showed a lessening of the construction period from eleven months in 1946 to eight months in 1947."⁷ The easier flow of materials and the improved skills of new construction workers represent an ultimate saving to the consumer which is not truly represented in the indices.

A factor contributing to the lack of acceleration in residential building has been the very active demand for labour and materials in the construction of business, industrial, and engineering projects. (See Table VII.) While the value of residential contracts awarded in the Toronto metropolitan area has not increased dur-

⁷*Annual Report of the Central Mortgage and Housing Corporation. (Ottawa, 1947).*

ing the three post-war years (in 1945 \$26,000,000 and in 1947 \$21,000,000) the value of all other kinds of construction contracts has doubled (rising from \$26,000,000 in 1945 to \$53,000,000 in 1947). The more attractive and secure type of employment offered in the construction of large buildings has removed from the residential field a very large labour force which could otherwise have been engaged in the construction of housing. Much controversy has arisen over the legitimacy of attempting to restrain business and industrial building during a period of acute housing shortage. The federal government has disclaimed any responsibility for such regulatory action and has declared that the municipalities must exercise any controls that could be devised. But in a complex municipal structure such as that of metropolitan Toronto, containing thirteen individual municipal governments, the difficulties of determining a common course of action are obviously insuperable, particularly in view of the fact that all municipalities welcome industrial and commercial buildings as revenue-producing assets whereas housing for the middle and low income families represents expenses for the provision of schools and other municipal services. With their anxiety to look after the welfare of the un-housed families in their communities and at the same time benefit the existing taxpayers, this dilemma of the municipalities may be described as pitiful. For the city of Toronto itself the situation is particularly poignant; the city has to hold within its boundaries the great mass of un-housed families and yet it has no vacant land on which permanent housing could be built for them. If the city of Toronto itself were to prohibit certain classes of non-residential building there would be no assurance that the labour and materials so released would be used for the construction of housing in the suburban municipalities who might simply benefit themselves by continuing their programmes of industrial and commercial building. As a practical operation, the deliberate diversion of labour and materials from non-residential construction into housing construction obviously could only be effected by a senior government and, specifically, by a governmental body which was already committed to responsibility for the total hous-

ing programme and had the facilities for directing its development through financial and legislative provisions.

As the post-war housing programme got under way one outstanding characteristic rapidly emerged. That was the lack of new housing built for rent. When the 1946 building season opened, 57 per cent of the houses under construction were being built for sale by speculative builders, 25 per cent were being built for owners, and only 18 per cent were being built for rent. (Virtually the only new rental housing being provided in the area were the three projects, each containing 200 dwellings, built by Wartime Housing Limited for the families of veterans.) This immediately represented a serious gap in the programme since at the end of the war there were in the city about ten thousand fewer rental housing units than there had been when the war started.

In 1930 about half of all the dwellings within the City of Toronto were houses occupied by their owners, the other half being rented houses and various forms of multiple housing such as duplexes, apartments, etc. From 1930 till 1940 there was a continuous decline in home ownership till in 1941 owner-occupied houses represented only 41.3 per cent of all the dwellings in the city. Since then, under the pressure of the housing shortage, there has been a marked increase in home-ownership, the proportion having risen to 47.1 per cent by the autumn of 1944. The competitive bidding of those looking for a home in the congested city caused prices of houses to advance sharply. Rent control prevented landlords from getting what they regarded as the full earnings from their properties and they took the opportunity offered by the unrestricted sales market. Consequently many long-time tenants faced the prospect of either moving or buying. Between 1941 and 1945 more than 8,000 houses, previously rented, came into owner-occupation. Consequently at the end of the war there were about ten thousand fewer rental housing units than there had been when the war started. This significant change of tenure took place in spite of the wartime orders which restricted evictions of tenants.

The post-war concentration upon the production of houses for sale rather than for rent is to be seen in the type of accommodation that has been built. In the Toronto metropolitan area during 1945 and 1946, 89.7 per cent of all units completed were single family houses (a few of them semi-detached), only 3.4 per cent were in the form of duplexes or apartments and 6.9 per cent were conversions. The types of accommodation provided are shown in detail on Table VIII.

The efforts to produce rental housing through the agency of Housing Enterprises Limited (a limited dividend housing corporation created by the federal government and the insurance companies) and the subsequent withdrawal of this agency in the spring of 1947 on account of high costs and rents, dramatized the fact that the production of new rental housing is not under existing circumstances a profitable undertaking. Although there are immediate prospects of full occupancy and adequate returns, particularly since the removal of rent control from new accommodation in July, 1947, any cautious investor has to reckon with the possibility that immediate profits might be more than wiped out by the future competition of housing built during a later period of lower construction costs.

The experience of the post-war years certainly indicates that under existing conditions the necessary supply of rental housing cannot be produced by private builders. It is the absence of this element in the housing programme that accounts for the failure to sustain and amplify the volume of production to the requisite level. The means by which a large volume of rental housing could be produced thus becomes one of the most important features of the nation's housing affairs.

Chapter Three: HOUSING COSTS

THE COST OF A 5,000 UNIT ANNUAL PROGRAMME

DURING 1946 the value of residential construction in the Toronto metropolitan area was somewhat more than \$26,000,000 for a production of about 4,500 housing units, while in 1947 construction contracts amounted to more than \$21,000,000 and 4,000 units were built. If the programme were maintained at an annual volume of 5,000 units the expenditures on construction would thus presumably be about \$30,000,000 a year. From one point of view this may be regarded as an alarming cost to be met out of the income of the community. From another point of view it may be regarded as a great source of employment and business for the community. To begin with, the construction of 5,000 housing units represents jobs for one year for about 14,000 men of whom about 6,800 would be employed on the actual building sites, while about 8,000 would be employed in the industries supplying building materials and in the transportation services.¹ The annual pay-roll of construction workers would be more than \$11,000,000. Orders for building materials to manufacturers and distributors, including transportation costs to the site, would vary between \$14,400,000 and \$17,500,000 with nine major supply industries participating:

(a) Cement, gravel, and sand.....	\$1,220,000
(b) Brick, tile, and stone.....	795,000
(c) Lumber and its products.....	6,810,000
(d) Lath, plaster, stucco, insulation materials.....	1,805,000
(e) Roofing materials.....	465,000
(f) Paint and glass.....	510,000
(g) Plumbing and heating equipment.....	2,970,000
(h) Electrical equipment and fixtures.....	620,000
(i) Other building materials (steel, etc.).....	790,000

¹Figures in this paragraph are derived from material presented in *Manpower and Material Requirements for a Housing Program in Canada*, a report prepared by the Department of Reconstruction and Supply (Ottawa, 1946).

In addition to these expenditures on labour and materials, contractors and builders would earn in overhead and profit about \$3,000,000 and real estate transactions would amount also to about \$3,000,000. At the same time professional people, especially architects, lawyers, engineers, and surveyors, would be busily occupied and there would be an expanded volume of business for the lending institutions responsible for financing the major part of the housing programme.

In order to place in its proper perspective the proposal for a \$30,000,000 (annual) housing construction industry it should perhaps be recalled that during the five pre-war years 1935-39 inclusive, the housing industry in the Toronto area was operating at an annual average of only \$13,500,000 and the construction industry as a whole (residential, business, industrial, and engineering projects combined) averaged only \$23,178,000 a year. This comparison may cause some doubt to be placed upon the ability of metropolitan Toronto's economy to carry such a large residential construction programme.

This comparison between the scale of the building industry in the pre-war years and the scale of operations which is now required should not, however, lead to the conclusion that the present programme is beyond our capacities. The fact is that between 1935 and 1939 there was substantial unemployment among construction workers and the construction industry was by no means working at its full capacity. Furthermore there are now improving prospects for a supply of skilled construction workers. During the last two years there has been a steady stream of men passing through vocational and apprenticeship training in the construction trades; during 1947 there have been between 7,000 and 8,000 in training throughout Canada. Also, during 1947 more than 1,500 skilled construction workers immigrated to Canada. In addition to this development of building skills the increase in production of building materials has been not unimpressive. The production of bath-tubs, for instance, has risen from 56,000 units in 1946 to 80,000 in 1947. Building bricks, though still a scarce commodity, have increased steadily in production from 190 mil-

lion in 1945 to 273 million in 1946 and nearly 290 million in 1947.

It is evident that the building industry has capacities and resources which it has never yet been able to bring into full operation. It may be anticipated that, in future years, it is not the incapacity of the building industry which is likely to slow down the progress of the housing programme; the major task which lies ahead will be the maintaining and supporting of the demand which will enable the industry to produce at its real capacity.

THE COMPONENTS OF HOUSING COSTS²

To the owner of housing the costs are made up of five components: the cost of building, land, money, maintenance, and taxes. Although the owner or purchaser of a house may meet these costs in various ways and at various intervals yet they must ultimately be paid out of the current income of the occupant. It is therefore convenient to think of these costs as being paid in regular monthly instalments as rent. The cost of carrying a \$7,000

TABLE A

GROSS MONTHLY COST OF A \$7,000 HOUSING UNIT		
	Monthly Payment	Per Cent
(a) Building Cost of Construction \$6,225	\$22.94	39
(b) Land Cost of Improved Lot \$775	3.23	6
(c) Money \$2,000 Cash at 3% \$5,000 N.H.A. Loan at 4½%	15.68	27
(d) Maintenance At \$80 Per Annum	6.66	11
(e) Taxes At 2% of \$7,000	11.66	17
	<hr/>	<hr/>
	\$60.17	100

²The figures used in this section are based upon data specially provided by the Central Mortgage and Housing Corporation. This data covered all houses for the construction of which loans had been made under the National Housing Act 1944 in the Greater Toronto area during 1946. The interpretation placed upon this data is that of the author and no responsibility is attached to the Central Mortgage and Housing Corporation.

housing unit over a twenty-year period can be broken down into the components shown in Table A (page 50):

It should be noted that in practice the private owner-occupant of a new house does not have to meet these full costs out of income. On a \$7,000 house a purchaser is normally required to make an initial cash payment of about \$2,000. This is drawn from his savings and it is not to be presumed that an owner-occupant would return this sum to savings or pay interest on it. It is, however, one of the component costs and the purchaser has in effect forfeited the interest which such savings would have yielded. In rental housing, therefore, this item must appear within the gross monthly cost to be covered by rent payments. But if, however, this cash payment is not included within the monthly payments that must be met by an owner-occupant the current costs would appear as follows: (here the \$2,000 has been deducted from the cost of construction in item (a) and the interest on the \$2,000 has been omitted from item (c)).

TABLE B

MONTHLY COST OF \$7,000 HOUSING UNIT TO OWNER-OCCUPANT		
	<i>Monthly Payment</i>	<i>Per Cent</i>
(a) Building		
Cost of Construction	\$6,225	17.60
Less \$2,000 Cash Payment		35
(b) Land		
Cost of Improved Lot	\$775	3.23
(c) Money		
\$5,000 N.H.A. Loan at 4½%	10.68	22
(d) Maintenance		
At \$80 Per Annum	6.66	13
(e) Taxes		
At 2% of \$7,000	11.66	23
	\$49.83	100

From the above break-down it is evident that reductions in construction costs offer the best prospects of reducing housing expenses since the building itself is the largest single item and the cost of the loan required to pay for building is the next most sub-

stantial element. And since the cost of borrowing money is such a prominent feature it is also evident that successful efforts to fortify the security of loans and so reduce interest rates may bring substantial savings to the householder. Ultimately, of course, the security of loans must depend upon the employment and solvency of the occupants of housing and so is deeply involved in the whole national programme for full employment and social security. But through the operation of the housing programme itself it may be possible to provide for greater financial security and a consequent reduction in the current expenses of housing; this may be achieved by improvements in the fabric of the house and in its setting within the community. The quality of housing may, in fact, come to be an essential factor in reducing its current expenses to occupants. This theme runs through the following discussion of the five component items in housing costs.

(a) *Building.* The cost of constructing a house depends upon its size and upon the price of the materials and workmanship employed. In general principle it must be remarked that a cheaper house does not necessarily reduce the cost to the consumer in view of the fact that housing expenses are items on a monthly budget and therefore depend not so much upon the initial capital sum as upon the length of time over which the amortisation payments can be spread. The better the design, the substance, and the environment of a house the longer will it remain useful and attractive and therefore the less should each successive occupant have to pay towards its initial capital cost. A \$5,000 loan available under the terms of the National Housing Act 1944 costs \$31.52 a month (interest and principal) if spread over twenty years but would cost only \$25.21 a month if spread over thirty years.

It is clear that houses of poor quality and temporary character, the costs of which must be paid off quickly while they retain some desirable characteristics, may ultimately prove to be the most expensive to the community. The ability of architects, manufacturers, and community-planners to design housing which in twenty and thirty years' time will be almost as desirable as it is today, may prove to be the most effective step towards reducing the current expenses of housing.

When it is realized that the cost of building represents less than 40 per cent of total housing expenses it becomes evident that the individual items of materials and labour represent but minor factors in the monthly payments. Even a 20 per cent reduction in the cost of labour (labour represents about 40 per cent of the cost of construction) would only reduce the monthly price of a \$7,000 house by about \$2.00.

(b) *Land.* The cost of suburban building lots in the Toronto area range between \$200 and \$1,000. For all houses built in the area during 1946 under the terms of the National Housing Act 1944 the prices of land fell into the following groups:

TABLE C

 PRICES OF LOTS FOR HOUSES BUILT THROUGH NATIONAL HOUSING
 ACT LOANS, TORONTO METROPOLITAN AREA, 1946

<i>Price Range</i>	<i>Per Cent of Lots in Each Price Range</i>
200- 299	2.8
300- 399	5.1
400- 499	10.0
500- 599	10.0
600- 699	21.8
700- 799	11.0
800- 899	26.3
900- 999	10.2
1,000-1,099	2.8
	100.0

Land costs may be reduced through the opportunity to use sites which have not acquired an inflated speculative or commercial value and which may be built upon without expensive preparations of grading and drainage. But if the attempt to find cheap land leads to placing houses at considerable distances from centres of employment the apparent saving to the consumer may prove to be offset by added costs of transportation. Furthermore, land which has not acquired considerable speculative value is only to be found in areas which do not possess urban services and amenities; the eventual need to supply these services and amenities may likewise impose unexpected costs upon the occupants of houses and taxpayers in general.

(c) *Money.* The cost of borrowing capital for the construction of a house and the acquisition of building land represents about one-quarter of all housing expenses. Through the procedure established in Canada by the three successive National Housing Acts and through the present administration of the Central Mortgage and Housing Corporation much has been done to stabilize this formidable component of housing costs. A crown corporation now shares with private financial institutions the risks of lending capital; the credit of the Dominion of Canada has been brought into play in order to make building money less expensive. C.M.H.C. has set up an elaborate nation-wide administrative organization to see that its loans are secure; by actual inspection of houses constructed there is an attempt to establish that the sound qualities of a dwelling will last throughout the period of the loan. By appraising the purchasers' incomes their probable ability to make periodic payments is judged and an attempt made to prevent borrowers from assuming obligations beyond their capacities.

The rate of interest required must be sufficient to meet three charges: (1) The normal rate of interest on investment capital; (2) The security against the failure of the borrower; and (3) The administrative charges. It is clear that private financial institutions could not stay in the housing mortgage business at a rate of interest lower than that which obtains today. Any prospect that interest rates could be reduced to 3½ per cent, as has sometimes been suggested, must be based on the willingness of the public to use public revenue for supplementing the cost of operating housing loans. The entry of the Central Mortgage and Housing Corporation into the field, with the aid of public capital, already makes it essential that the loans so placed should be protected against the risks of unemployment and neighbourhood deterioration. It should certainly be realized that at a time when the shortage of housing, coupled with high building costs, is forcing many householders to assume loan obligations which are dangerously near the limit of their financial capacity, the risks involved in lending building money are very great. Only history will be able

to prove whether the present 4½ per cent interest rate is sufficient to cover these risks and the costs of administration.

In addition to the interest that must be paid on money loaned, the purchaser of a house is today required to make a substantial cash payment. For houses built in the Toronto area during 1946 under the terms of the National Housing Act 1944 this payment has represented from one-fifth to one-third of the capital cost of the house and lot.

TABLE D

CASH CONTRIBUTIONS OF BORROWERS. LOANS MADE UNDER NATIONAL HOUSING ACT 1944. TORONTO METROPOLITAN AREA, 1946		
Price Range, House and Lot	Average Cash Payment	Per Cent of Total Cost
\$5,500-6,500	\$1,587	25
\$6,500-7,500	\$1,995	29
more than \$7,500	\$2,731	33

In other words the loan on a \$6,000 housing unit has not usually exceeded \$4,500, the loan on a \$7,000 unit has not exceeded \$5,000 and the loan on a \$8,000 unit has not exceeded \$5,300. These substantial cash payments which borrowers have had to make have arisen largely of course because of the distinction that has been made between the actual cost of a house and lot and the "lending value," which is a smaller sum regarded by the loan appraiser as the true value of the house. During 1946 "lending values" in the Toronto area ranged between 80 and 90 per cent of the estimated actual cost of the house and lot. For instance a house and lot actually costing \$8,300 would be assigned a "lending value" of \$7,000 on which a loan of \$5,700 would be made (that being the legal maximum loan for a property valued at \$7,000); the purchaser would consequently be required to make a cash contribution of \$2,600.

The element of the cash contribution in housing loans has created a somewhat misleading comparison between the costs of home-ownership and rental housing. To obtain a strictly comparable analysis of the component costs the house-purchaser

should include the interest and the retirement of the capital sum made as a cash payment. (The implications of this point are brought out in Tables A and B.) For if this cash payment were not made, the interest thereon would enable the householder to occupy rental housing at a proportionately higher monthly rate.

(d) *Maintenance.* The expenses of keeping a house in good order and repair usually occur at such irregular intervals that few home-owners regard them as part of the monthly and annual cost of housing. They are none the less very real costs, the proportions of which are inversely related to the durability and cost of the original structure of a dwelling. It costs less to build with perishable materials but costs more to defend them against deterioration. For the security of the lending institutions and the welfare of future generations of occupants it is essential that physical deterioration should be held in check; the process of obsolescence is the most serious drain on housing supply and leads to costs of replacement which will ultimately fall upon the community at large.

In large-scale rental housing the costs of maintenance are often taken to be \$100 annually per housing unit. A figure of \$80 annually has been taken here to provide adequately for repairs, replacements, decoration, and other normal items of upkeep required by the small home owner.

(e) *Taxes.* The streets, utilities, schools, parks, and other services that are required by householders are paid for through property taxes. Without these services a household could not function; the amenities of the neighbourhood that are largely created by these municipal services form part of the value of a house that must be paid for. It is widely believed that since a large proportion of the municipal tax revenue is spent by the local government on services not directly associated with real property, that these taxes should not be based on property values and become an element in housing costs. But it may equally well be argued that all community services which make a city more desirable to live in and work in must, however indirectly, influence the value of every house within its area.

It is difficult to make generalizations about the cost of local taxes because these vary so much between one municipality and another and between different districts in the same municipality, and they also vary over the time during which mortgage payments are being made. The principal cause of variation is the method of paying for local improvements in newly developed areas; these are commonly assessed against properties in a new residential area over a period of about five years after which the rate of taxation reverts to a normal mill-rate on the assessed value. In the absence of any better uniform figure which can be used, it has here been assumed that the taxes on new houses represent annual payments of about 2 per cent of the total value of a property. In other words the taxes on a \$6,000 house are about \$120 a year and the taxes on a \$7,000 house are about \$140 a year.

It should be observed that it is now common practice for local taxes to be paid by the lending institution which has placed a mortgage on a new house. The purchaser's monthly payments include payments for taxes. This procedure protects the mortgage holder from finding that a debt has accumulated against a property on account of unpaid taxes.

THE COMPONENTS OF CONSTRUCTION COSTS

In 1943 a survey was undertaken by the Dominion Government's housing agency to determine the relative proportions of the costs of materials, on-site labour, overhead, and profits in the building of houses.³ The analysis, based on the experience of a large number of contractors throughout Canada who had been lately engaged in residential building, yielded the following ratios:

Cost of materials	50-55 per cent
Cost of on-site labour	35-40 per cent
Overhead and profits	10 per cent

The experience of post-war building seems to indicate that a higher proportion of costs should be attributed to overhead and

³O. J. Firestone: *The Labour Value of the Building Dollar*. A report made for the Housing Administration, Department of Finance. (Ottawa, 1943).

profits, particularly during a period of reorganization when builders are faced with the hazards arising out of uncertainties in the supply of both materials and skilled labour. On the whole it appears reasonable now to attribute costs of construction to materials, on-site labour, and overhead in the proportions of 50, 35 and 15. On this basis a house which contains materials costing \$4,000 would consume \$2,800 in labour costs on the site and would carry \$1,200 in overhead and profits representing a total cost to the purchaser of \$7,000.

The costs of house-building vary in relation with the size and plan of the house and also in relation with the materials of which it is built. Since there is an infinite number of possible variations in the form and substance of a house it is extremely difficult to present simple comparable generalizations about the cost of building. In order to make valid comparisons between the costs of building in solid brick and the costs of building a wood-frame dwelling it would be necessary to compare two houses of similar size and plan constructed under identical circumstances. Actual building experience does not offer the opportunity to make such scientific comparisons.

The housing units created in the Toronto metropolitan area in the post-war years may be conveniently classified under five different types of construction: wood frame with wood siding or shingles; wood frame and brick veneer; cinder or cement blocks and stucco; brick facing and masonry blocks; and solid brick. About one-third of all the houses built in the area have been constructed of solid brick, about one-quarter have been of wood frame construction, and another quarter have been built of masonry blocks with a brick facing. (See Table IX.)

Although it is not possible to determine the costs of all these houses which were built by many contractors under many different circumstances, yet it is possible to formulate some general comparative figures through the use of representative examples. This method was used in a recent study published by the Department of Reconstruction and Supply entitled *Manpower and Material Requirements for a Housing Program in Canada*. Here

the "representative" examples were taken to be housing units of a desirable character constructed in accordance with the standards required for obtaining loans under the National Housing Act 1944. For such "representative" housing units specifications of materials were prepared so that comparisons could be made between houses constructed of different materials but all of the same size and accommodation. For this purpose the sizes of the representative examples have been taken as follows:

	Cubic Feet	Number of Rooms
Single Family House	16,000	6
Multiple Unit Dwelling	15,000	5½

(The representative "multiple unit dwelling" is assumed to be one living unit within a building containing three dwellings; its cost therefore represents one-third of the total cost of such a building.)

The material specifications of each representative house have been classified into 63 items under 10 headings:

1. Cement, gravel, and sand
2. Brick, tile, and stone
3. Lumber and its products
4. Lath, plaster, and insulation materials
5. Roofing materials
6. Paint and glass
7. Plumbing equipment and fixtures
8. Heating equipment and fixtures
9. Electrical equipment and fixtures
10. Other materials.

Prices in the Toronto area (December 1946 to February 1947) were obtained for all of the items specified and these were assembled to give the total cost of materials required for the construction of eight different types of dwelling unit, five types of single family house, and three types of multiple unit. Two examples of these detailed schedules are shown in Tables X and XI. These schedules are identical with those used in the study entitled *Manpower and Material Requirements for a Housing Program in Canada*, but it was found that costs in Toronto at the turn of the year (1946-47) were in all cases higher than those which

had been assembled for the Canadian study published in September, 1946. These total costs, of course, require further modification as the prices of building materials change during subsequent months.

To the costs of materials for each type of house have finally been added the proportionate costs of labour and of contractor's overhead, thus obtaining a figure for the total cost of each representative type of dwelling. These compilations are shown on Tables XII(A) and XII(B); in the former table the proportionate percentages of materials, labour, and overhead have been taken as 50, 35, and 15 respectively, while in the latter table they have been taken as 52.5, 37.5, and 10 per cent respectively. The total costs have been summarized in Table E, following, based on the proportions used in Table XII(B). Here also are shown the costs per cubic foot.

TABLE E

COSTS OF CONSTRUCTING REPRESENTATIVE TYPES OF DWELLING IN THE
TORONTO AREA, JANUARY, 1947

Type of Dwelling	Total Cost of Unit	Cost per Cubic Foot
Single Family Houses of 16,200 cubic feet		
(a) Wood frame with siding	\$7,344	45.4 cents
(b) Wood frame with brick veneer	7,712	47.6
(c) Masonry blocks and stucco	7,278	44.9
(d) Masonry blocks, brick facing	7,952	49.0
(e) Solid brick	8,028	49.5
Multiple Unit Dwellings of 15,000 cubic feet		
(f) Wood frame with siding	\$5,405	36.5 cents
(g) Masonry blocks, brick facing	5,472	36.4
(h) Solid brick	5,529	36.8

The costs of construction given above have been derived from:

- (a) Schedules of costs of materials of which two examples are given in Tables X and XI;
- (b) Compilations of materials, labour, and overhead costs in the proportions of 52.5, 37.5, and 10 per cent respectively as shown in Table XIIB.

The schedules of materials given in Tables X and XI give some suggestion of the great diversity of operations that are set

in motion by the decision to build a house. There must be gathered together on the building site a great variety of materials brought from many different parts of the country and transported by many different agencies. Some of these materials are already manufactured, some of them are roughly finished, and some of them reach the site in their raw state. A great variety of skills and tools are then required for fashioning these materials and assembling them into the form of a house. The very diversity of these operations—the number of primary producers, manufacturers, tradesmen, and transporting agencies which are involved—all contributes to the ultimate complexity of costs which is widely spread and deeply rooted in the economy and wage structure of the nation. It is this very complex nature of the building process that makes it so difficult to identify where economies could most profitably be sought. Critical observers of the building industry have only been able to agree that, within the traditional processes of house building, there is no one simple approach to reducing costs. "Any considerable cost reduction," declares an eminent American authority on the subject, "must come from an accumulation of many relatively minor items, no one of which, taken by itself, is of outstanding importance."⁴ The truth of this statement may be illustrated by the following examples showing the approximate percentages by which the total construction cost of a dwelling unit would be reduced as the result of a 20 per cent reduction in the cost of various component items.⁵

Lumber, at the site.....	4.6%
Plumbing materials, at the site.....	1.2
Heating materials, at the site9
Cement, gravel and sand, at the site8
Carpenters' wages	2.8
Plumbers' wages	1.0
Wages of skilled workers in general.....	5.8
Wages of unskilled and semi-skilled workers.....	1.7
General construction overhead and profit.....	2.0

⁴Miles E. Colean: *American Housing* (New York, Twentieth Century Fund, 1944) p. 52.

⁵Figures based on component costs developed in Firestone, *Labour Value of Building Dollar*, quoted above.

A 20 per cent reduction in plumbing materials would reduce the total cost of constructing a dwelling by only 1.2 per cent, and a 20 per cent reduction in the price of lumber, by far the largest single item in house construction costs, would reduce the total cost by no more than 4.6 per cent.

From time to time it is claimed that high costs of construction can be attributed to this or that element in the building process. It is at the present time a commonplace to say that the productivity of labour is to be blamed; it is said that construction workers are not performing a day's useful labour for a day's wage. Though there may be some truth in this, the significance of any such individual item of costs is diminished in importance when it is considered in relation to all other elements in the cost of construction. The few examples quoted above simply serve to illustrate this all too obvious fact that lower costs of construction cannot be achieved by any one facile policy; they must await the concurrence of many independent events which may influence prices and efficiency in those many economic activities directly or indirectly associated with the building process.

THE NATURE OF THE BUILDING INDUSTRY

Any serious consideration of the costs of building houses seems to lead to the conclusion that no really significant changes in the levels of costs are likely to be achieved without some revolutionary changes in the building process itself. In the simplest terms, that process consists of the movement of materials from their primary source into the finished building with labour being applied to the fabrication of these materials at various stages along the line. The ultimate cost of a building is, in fact, made up of the accumulated costs of moving the materials, *plus* the accumulated costs of the labour that has been applied to those materials, *plus* the accumulated overhead and profit of all those who have handled the materials *en route*. It is clear therefore that the efficiency and economy of the building process is most likely to be improved by efforts to smooth the flow of materials and to con-

centrate the work of fabrication at the fewest possible points along the line.

A study recently made by the United States National Housing Agency revealed the fact that some 40 per cent of the costs of materials at the site is attributable to charges for distribution and transportation, while the remaining 60 per cent is accountable to the costs that accumulate up to and including the process of manufacture.⁶ After leaving the manufacturer's warehouse it is common procedure for building materials to be shipped again to a retailer and stored again before being finally delivered to the site for assembly into a building. This does not apply of course, to all kinds of building materials, some of which are delivered directly to the site by the manufacturers and so save the intermediary costs of transportation, storage, and handling. But the need for an elaborate system of distribution has been made necessary by the characteristically small scale of the firms undertaking the actual construction of houses. House-building has not attracted large-scale construction firms and the field has been left almost entirely to the small home-builder whose organization can quickly adapt itself to the fluctuating demand for housing. The small speculative builder undertakes the erection of only a few houses at a time, saving the cost of managerial overhead and office space and protecting himself from market uncertainties by keeping his output in line with the immediate demand of prospective purchasers. Under such circumstances it has been impossible to smooth out the flow of building materials and simplify the process of production. Fundamental changes in the process can only be brought about through the entry of large-scale producers into the housing industry, and they could only enter upon such a business if they could anticipate a continuing market which would justify the necessary capitalization. Since the expectation of such market conditions has never yet seemed justified, the organization of the residential building industry has stagnated. This experience seems

⁶National Housing Agency, *Housing Costs* (Washington, D.C. December, 1944).

to indicate that no great revolutionary changes and economies can take place unless governmental authority can either guarantee the housing market or be prepared to capitalize the housing industry itself. The difficulty of bringing large-scale fabricating industries into operation has now been demonstrated in the United States where even during the housing shortage of 1946 pre-fabricators were unable to raise capital privately and had to obtain funds from the government's Reconstruction Finance Corporation in order to establish and equip their production plants. It may be said, however, that if there were an assured demand for its products a large-scale housing industry could be organized with private capital. Is it possible that this might be brought about by the introduction of a public housing programme which would strongly supplement and reinforce the private market for housing?

The hope that substantial economies could be achieved by a more industrialized process of house-building is suggested by a comparison of the labour content in the cost of making a house and in the costs of various manufactured products. Table F shows that the percentage labour content in the value of manufactured goods in general averages 18 per cent. Compared with the labour costs of house-building, 35 per cent for on-site labour alone, this points to the conclusion that residential building has not yet acquired the characteristic economies of industrial technology. The principal reason for this contrast lies, of course, in the fact that a house is immobile and its final assembly has at present to be done piece by piece, out on the site, under all the hazards of weather, and without permanent equipment. It has not been possible to apply to residential construction the assembly line system with tasks broken down into simple and comparatively unskilled operations; in residential building the assembly line is fixed and the workers move.

It is only when large-scale projects are planned that there are opportunities to introduce important features of industrial organization aimed to reduce the high labour costs in the building process. First of all, by standardizing dimensions and details it

TABLE F

LABOUR COST AS A PERCENTAGE OF THE TOTAL VALUE OF
VARIOUS CLASSES OF FINISHED MANUFACTURED PRODUCTS*

House (Labour on site only)	35-40%
Chemical products	15
Non-metallic mineral products	11
Non-ferrous metal products	15
Iron products	28
Wood and paper products	20
Textiles and textile products	19
Animal products	9
Vegetable products	10
Miscellaneous products	19
Average	18%

*Derived from Statistics in *Canada Year Book*, 1946, pp. 400-405.

becomes possible to place a greater proportion of the finishing work under factory conditions where the work can proceed at a steady flow throughout the seasons, uninterrupted by weather conditions and the irregularities of the market. Ultimate economies are also to be sought by fabricating wall sections off the site and simplifying the elaborate form of structure which has been evolved under the conditions of hand assembly. At the present time the basic form of house building is a structural framework to which are applied layers of interior and exterior insulating "skins" each applied by different tradesmen—bricklayers, carpenters, plasterers, and painters. In this conception of a structure there has been little advance during the age of industrialization. We now await the results of experiments being prepared at the National Research Council in Ottawa which may lead to a system of assembly lending itself to partial factory production and providing a kind of industrialized residential construction suitable for Canadian conditions.

Whatever economies may be achieved by applying more of the necessary labour to building materials before they reach the site, there will always remain a relatively high proportion of on-site labour costs for assembly. Here again there are economies that arise logically out of large-scale projects. Efficiency may be

gained by the repetition of familiar tasks; by planning the production of a large group of houses it is possible to move working teams from one unit to another in sequence as each process is completed. The building work can be carefully broken down into a number of operations for each of which the necessary personnel and equipment can be brought into action as each unit in turn passes through the successive phases in its assembly and completion. In Canada we have already made some attempt to gain efficiency through the building of groups of houses; the "integrated" housing scheme sponsored by the Central Mortgage and Housing Corporation was largely aimed at providing the conditions under which a builder could apply his labor most efficiently by building a group of houses in one planned operation. The guarantee of sale provided by the Corporation also removed the risks of marketing a group of houses all brought to completion at about the same time in the same locality. It is too early yet to appraise the economies which may be attributed to the "integrated" scheme.

In this approach to building economy there is a fundamental dilemma concerning the scale of building organization. It is a matter of general belief that the small-scale speculative builder, capable of producing from five to a dozen houses a year, can work more economically than a large organization which must support some high-salaried executives and maintain a down-town office with a staff of draftsmen and stenographers. This is the contention of the organized home-builders who have resisted the introduction of officially sponsored large-scale producers such as Wartime Housing Limited and Housing Enterprises Limited. Though there is no statistical evidence to support this claim of the small home-builders (the overhead costs of Wartime Housing Limited have never been published), yet it is probably true in so far as these two Canadian large-scale housing organizations are concerned. The fact is, however, that Wartime Housing Limited had to be organized for administration on a national basis in order that an emergency demand for housing could be fulfilled regardless of cost. To some extent Housing Enterprises Limited must also be

regarded as a public service organization which had to carry a large administrative overhead simply in order to operate on a national basis. It must be recognized that neither of these two organizations was set up on a large scale for the specific purpose of introducing new and more economical building procedures. Obviously the size of the operating organization does not in itself create economies and may well be the cause of administrative expenses. But this fact and the experience of Wartime Housing Limited should not be allowed to confuse the issue. It is beyond dispute that there are certain economies in the building process which could only be introduced by large-scale organizations working on large-scale projects; such producers should be established in the field in order that they may evolve new industrialized methods of housing construction. Large-scale housing organizations which fail to improve on the production methods of small-scale builders and simply add further administrative costs thereto, certainly have no justification for their existence.

The prefabrication of wall panels, floorsections, stairs, kitchen sets, and mechanical units must be done in quantity in order that economies of factory production may become effective. But the cost of transporting bulky prefabricated sections confines the radius of distribution to a single metropolitan area. The market for prefabricated building sections is not a national one but is of only local proportions. It is therefore the more difficult to put such prefabrication processes into operation with any kind of economic security. In fact it is only when large-scale local projects are planned that any significant degree of prefabrication can be obtained. A local project must itself be large enough to support a process of prefabrication. It is at this scale of operations that the large producer first begins to overtake the costs of the small home-builder; and this can only be achieved when shrewd engineering and architectural design are brought into play.

No mention of the word "prefabrication" would be complete without reference to the popular belief that any kind of standardization implies an objectionable uniformity in the design of houses. This is one of those engaging myths of housing that has

its counterpart in the allegation that families moved out of slums into new housing habitually keep their coal in the bathtub. This kind of objection to prefabrication and the design of large-scale projects is certainly quite groundless. The Toronto urban area is characterized by the extreme monotony and dullness of the houses that have been built by the small-scale home-builder; there has been an endless repetition of the same types of house, their basic uniformity made all the more evident by the vain attempts to give each dwelling some individuality through the application of some trivial surface ornament. The planning of large-scale projects provides the opportunity to organize deliberately some variations of design arising logically out of the orientation, internal planning, and materials of individual units; such variations may be introduced in such a way that the grouping and colour of contrasting elements may have some dramatic effect. It is certainly significant that in the Toronto area the only communities constructed since the war whose planning has departed from the monotonous orthodoxy of real estate subdivision have been the three projects developed by Wartime Housing Limited and a few other private projects under unified architectural control.

What simple conclusions seem to emerge out of this brief review of the complexities and paradoxes within the residential building industry? The following statements may receive general acceptance and at least serve as a starting point for further research:

(1) No very significant changes in housing costs can be expected to take place as long as the type of dwelling and type of producer retain their present stereotyped form.

(2) Without changing the materials and forms of dwellings, certain economies could be effected by large-scale producers through a reduction in the number of handling operations in moving materials from primary source to building site.

(3) If changes in the material and form of dwellings were acceptable, large-scale producers could substitute off-site machine-tool processes for many operations now performed on the site by hand.

(4) Large-scale producers cannot enter the field unless there are opportunities to develop projects large enough in scale to justify new forms of operation and offset the overhead costs of administration.

(5) Large-scale producers cannot enter the field unless there is the assured continuity of demand which would make it possible to attract capital.

(6) Building projects carried out on a larger scale than is at present customary would provide an opportunity for less stereotyped design and more imaginative planning; this in itself would be likely to stimulate demand for housing.

Chapter Four: THE COMMUNITY'S CAPACITY TO PAY FOR HOUSING

ANY examination of the housing problem leads inevitably to the conclusion that the community's capacity to pay for housing is the limiting factor in the accomplishment of a programme. In order to fill the housing needs of metropolitan Toronto the building industry must not only be equipped to build the required number of units, but it must also be able to provide this quantity of housing at a price that can be reached by the families in the community—and this without departing from reasonable standards of quality. Unless the cost of owning or renting a new home can be brought within the financial capacity of the majority of the families in the area the entire programme may well collapse and bring down with it many of the hopes for security and full employment in the post-war years. The danger signal was heard early in 1947 as housing production failed to fulfil its quota.

To the solution of this problem there are two approaches, each of which must be pursued simultaneously. By structural economies and by improved organization of the building industry the cost of housing itself must be reduced while, at the same time, the purchasing capacity of families must be raised. Unfortunately these two developments are perversely inclined to conflict with one another. To increase family income by raising wages threatens also to raise the cost of building. Conversely the lowering of building costs, through reductions in wages and the introduction of labour-saving methods of construction, might also reduce the earnings of a large element of the population—unless the total volume of building was thereby proportionately raised. The dilemma is fundamental. The postulates are nicely contradictory.

The effective economic demand for new housing is created by those families who need housing and who have the money to pay for it. The community's capacity to obtain the necessary additions to its stock of housing is the sum of the capacities of individual families. As a first step towards measuring the effective demand it is therefore necessary to determine the numbers of families at various income levels and to estimate how much families of various sizes and incomes can afford to spend on housing. It must be confessed that neither of these two calculations can be made with any real accuracy. To begin with, the decennial census is the only occasion on which comprehensive records of family income are obtained, and we are therefore compelled to base our calculations on figures derived from the 1941 census. Furthermore, the proportions of their incomes which families spend on housing vary considerably under the pressure of circumstances, and it is therefore difficult to anticipate to what lengths families may go in order to obtain accommodation which they urgently need. The analysis which we are able to present cannot therefore do more than depict in general terms the nature of the economic problem with which the community is faced.

DISTRIBUTION OF INCOME

At the time of the 1941 census there were about 204,000 households in the Toronto metropolitan area. (See Table XIII.) A large proportion of these households, nearly half of them, had incomes between \$1,000 and \$2,000. About 30 per cent of all the households had incomes of more than \$2,000 and about 12 per cent had incomes of less than \$1,000. Since discussions of housing always involve reference to "upper," "middle," and "low" incomes it is convenient also to divide families into these groups.¹ If the

¹In the literature of housing these terms have been used with various shades of meaning; since they inevitably occur with considerable frequency in any discussions of housing it would be valuable to possess simple and universal definitions of the terms "low-income family" and "high-income family." In the United States Housing Act 1937 families of low-income are defined as those who "cannot afford to pay enough to cause private enterprise in their locality or metropolitan area to build an adequate supply of decent, safe and sanitary dwellings for their use."

families in the Toronto area are marked in the order of income received and then divided into three numerically equal groups, it is found that the upper-income group contains all those with incomes of more than \$2,000, the middle-income group all with incomes between \$1,200 and \$2,000, and the low-income group those with incomes of less than \$1,200. The average income of the middle group was \$1,549 and of the low-income group \$826. These figures refer only to the Toronto metropolitan area where incomes are above the average; for each metropolitan area in Canada there is a different and characteristic distribution of incomes giving somewhat different lines of demarcation between the upper-, middle-, and low-income groups. In Windsor, Ontario, for instance, where there is a more homogeneous type of employment, the middle third was concentrated in 1941 between \$1,400 and \$1,900, while in Saint John and Quebec City the middle third lay between \$1,000 and \$1,500.

In discussing incomes in relation to housing it is necessary to assess the total incomes of households, and not only the incomes of the heads of households. Though contributions to the family income made by members of the household other than the prin-

This attempt to describe the expression in terms of housing supply, the very quantity which is unknown, leaves us about where we started. An even more circumambient definition is that found in Canada's National Housing Act 1944 where a "family of low income" is defined as one which "receives a total family income less than five times the economic rental of a family housing unit required to provide sufficient accommodation for the said family." This is an equally elusive definition and must be criticized on account of its arbitrary acceptance of the generalization that one-fifth of income is a reasonable proportion to be devoted to rent.

The Curtis Committee, in its 1944 Report, neatly avoided these terminological pitfalls by simply ranking all families in any given area in the order of income received, and then dividing them into three numerically equal sections, the upper-, middle-, and lower-income groups. By this procedure the term "family of low income" has a simple meaning that does not have to be explained by reference to some quite unknown facts about housing. By making a separate calculation for each metropolitan area the Committee took account of the realistic consideration, important for all housing appraisals, that income and rental patterns vary in different parts of the country. Where the terms "upper-," "middle-," and "low-" income groups occur in this study they are used in the same sense in which they were employed in the Curtis Report.

cipal breadwinner may not be very substantial, yet they cannot be disregarded. On the other hand, income figures used in housing surveys and calculations should be based on biological families without lodgers or sub-tenants and without sons and daughters of adult age. For the periods of housing shortage and in areas of low-income and substandard housing it is commonly necessary for a family to shelter additional persons and gain additional contributors to the rent. The inclusion of such contributors may create a somewhat false impression of the real capacity of the family to pay for a self-contained dwelling unit. The income figures employed in this study are based on all those families covered by the 1941 Household Census (a 10 per cent sample) which contained only members of one biological family without lodgers and without sons and daughters over the age of 24. Within these families it was found that the contributions of those other than the head of the household represented an average 5.3 per cent of the total family income.

For comparison with the 1941 family income figures on which this study has been based there is given in Table XIV the percentage distribution of individual income-tax payers as it has been estimated for Ontario in 1946 by the Department of National Revenue. It is seen that 60 per cent of these individual taxpayers have incomes of less than \$3,000 and 40 per cent have less than \$2,000. No current figures are available to show the incomes of households in the Toronto area.

PROPORTION OF INCOME ACTUALLY SPENT ON HOUSING

According to a commonly accepted rule-of-thumb a family can afford to pay one-fifth (20 per cent) of its income for housing accommodation, whether this be in the form of rent or periodic payments for the ownership and maintenance of a house. This standard may be applied to the Table of Income Distribution (Table XIV) to provide a Table of Rent Capacity (Table XV). It is seen that about 16 per cent of the families in the area could be expected to pay more than \$50 a month for housing (those with incomes of more than \$3,000), about 46 per cent could pay

between \$25 and \$50, while about 30 per cent could not pay more than \$25 a month.

When the rule-of-thumb is applied to the three main income groups it is found that the average middle-income family could pay a rent of about \$26 and the average low-income family about \$14. In view of these theoretical levels of rent capacity it is rather surprising to find that in 1941 (the year on which our income figures are based) the official index of rents in the Toronto area, as published by the Department of Labour, shows that "six-roomed houses with modern conveniences" were renting for \$28 to \$40 and "six-roomed houses with incomplete modern conveniences" were renting for \$20 to \$28.² At the end of 1947 rents in Toronto were officially listed as \$34 to \$38. If it is indeed true that the normal rents being charged for family housing units are theoretically so far beyond the reach of the average middle-income family and that a low-income family is theoretically quite incapable of meeting the rent even on a house "with incomplete modern conveniences," then either the theory needs some further examination or the housing situation is a good deal worse than has commonly been supposed.

The belief that families can and usually do spend about one-fifth of their income on housing accommodation was supported by the evidence of a Canadian study of family budgets made in 1937-38.³ From this it appeared that "families living in rented dwellings spent 20 per cent of total living expenditure for shelter. Those residing in their own houses paid out a slightly lower proportion of 19.3 per cent." From the sample group of 1,135 British-Canadian families on which the study was based it also appeared that the proportions of income spent on housing were almost uniform throughout all income levels in the case of tenants, but owners at lower income levels paid considerably less than 20 per cent.

But the evidence supplied by the Curtis Report in 1944 by

²*Labour Gazette*, July, 1941, p. 865.

³Dominion Bureau of Statistics, *Family Income and Expenditure in Canada 1937-1938*. (Ottawa, 1941).

no means supported this belief. The far larger sample of the population covered by the 1941 census showed that low-income families in all urban areas had to pay a rent far beyond their theoretical capacity and even middle-income families paid considerably more than a fifth of their income. Furthermore it appeared that rent levels in the Toronto area were particularly high in relation to income. Low-income families, instead of paying the average \$14 which was their theoretical capacity, were in fact paying almost twice that amount, an average of \$25; this was \$5 more than was being paid by low-income families in Ottawa, Hamilton, London, and Windsor. Middle-income families in the Toronto area were paying only \$3 more than their theoretical capacity of \$26; here the discrepancy between theory and practice was only slightly more marked in Toronto than in other metropolitan areas. In Montreal and Windsor middle-income families were in 1941 actually paying less than their theoretical capacity. (See Tables XVI and XVII.)

There is an unmistakable relationship between income levels and the proportions of income paid for rent. Toronto families with incomes between \$1,500 and \$2,000 have been paying, on the average, 21 per cent of their income for rent. Those with incomes between \$1,000 and \$1,500 have paid about 25 per cent and those with less than \$1,000 a year have averaged about 40 per cent of their incomes in rent payments. It must be concluded that the rule-of-thumb concerning rent capacity has arisen from a generalization that over-simplifies the facts. It may be true that the statistical average of all rents paid by families of all incomes does represent about one-fifth of the statistical average of all incomes. But this may well occur if the excessive rents paid by low-income families are balanced by the relatively easier rents paid by high-income families.

A fundamental cause of variations in the relationship between incomes and rents is the size of the family. A childless married couple obviously does not have to spend such a large proportion of its budget on food and clothes as the parents of four growing children must spend; they can consequently afford to spend con-

siderably more on their housing accommodation. To a lesser degree the parents of a six-year-old only child have more rent money available than the parents of two teen-age children, though the family incomes may be identical. Unfortunately it is the families with more children which need more housing accommodation; to obtain more rooms for the same amount of money a family must be prepared to accept a lower standard of housing—fewer modern conveniences, smaller rooms, and a less desirable neighbourhood. With the need to keep a growing family fed and clothed at current costs of living it is usually necessary for housing standards to be relaxed. So a continual demand is maintained for the city's obsolescent stock of housing in spite of its lack of modern conveniences and neighbourhood amenities.

The relationship between family size and rents is demonstrated in Table XVIII, showing the rents paid by different types of family at three different income levels. It reveals that the costs of raising children do, in fact, have a marked effect upon rent capacity. Childless families have paid four or five dollars more for rent each month than families with two children, while families with two children paid two or three dollars more than those with four children. It should be pointed out that since larger families require more housing space their rental funds have to be stretched further. The fact that larger families have paid less rent is therefore only a partial indication of the lower standards of housing which child-raising necessitates. Families with more children not only paid less rent but with that rent they needed to buy more housing accommodation.

It was, of course, the recognition of these very familiar truths that led to the introduction of "family allowances" in Canada. These payments to some extent compensate parents for the fact that in our economic system the reward which a man receives for his labour bears no relation to his family expenses or to the contribution he and his wife make to the state by raising a family. Family allowances have done a great deal to reconcile the facts of competitive economy with the equally real facts of household economy. The figures in Table XVIII are derived from the census

of 1941, the year previous to the introduction of family allowances; no record yet exists of the effect which these payments have had upon the relationship between family size and rents paid. It may be assumed that a family allowance is a contribution to the total family income, to be distributed *pro rata* amongst the items on the budget; on this basis one-fifth of a family allowance would be a contribution towards rent. The average allowance is \$6.00 per child per month, of which \$1.20 may be regarded as available for rent. It can be seen that family allowance payments do not, therefore, offset the recorded differences of rent actually paid by larger families.

In Table XVIII figures are shown for rents paid in the whole metropolitan area and also for the city of Toronto itself and the suburban municipalities or "fringe" area. From this it appears that housing accommodation within the city itself was considerably more expensive than in the suburbs. Families of the same size and income have to pay four or five dollars more each month to live within the city. However, if the family wage earner living within the city could walk to his place of employment and so save costs of transportation this differential would be about offset. (Sixty-four rides on a Toronto street car cost \$4.00.) But this certainly does not place suburban and city districts at parity because there are comparatively limited areas within the city from which it is possible to walk to a place of employment; also, from the family point of view, the suburban areas offer far more attractive environment in which to raise children.

RENTS AND THE FAMILY BUDGET

Amongst upper-income families, where there can be considerable flexibility in the budget, it is entirely a matter of choice and convention how much is spent on housing. The fact that such families customarily spend about the same proportions of their incomes on housing can only be attributed to the conventional attitudes of people and their tendency to conform with the *mores* of the society in which they live. In order to become identified with a community it becomes necessary to accept its standards

of normal behaviour. One must dress in a certain way and be able to produce certain evidences of the social status to which a family aspires. It may even be regarded by some as *necessary* to possess a certain quality of car, certain kinds of household furniture, and some liquor. By allocating its available resources in certain proportions amongst the competing demands upon the budget it is possible for a family to approximate most closely to the normal standards of the society in which it is placed. The upper-income families which habitually spend about one-fifth of their incomes on housing do not do so on account of economic necessity but on account of social conventions which place a restraint upon the potential flexibility of their budgets. It should be recognized that it is only the acceptance of such conventions which prevents a comparatively well-to-do family from spending an unusually large proportion of its income on buying, for instance, fine paintings, or a valuable grand piano, or a sailing boat, or an abnormally expensive professional education for the children. There are indeed many objectives in life more to be applauded than conformity with accepted conventions.

But the smaller the family's income the less flexibility can there be in the proportions spent on food, clothing, and shelter. At the lower levels of income the household commodities purchased approximate more and more closely to the bare necessities of living, and finally reach an irreducible minimum if life is to be maintained at an adequate level of health and decency. When low-income families have to make an excessive expenditure on housing, to such an extent that the remaining funds are insufficient to maintain a family's standards of health, then this becomes a matter of public concern.

Let us suppose, for instance, that at current costs of household commodities a family of two adults and two children requires \$100 a month to maintain an adequate standard of living, *exclusive of rent*. This standard could be maintained if the family had an income of \$125 a month (\$1,500 a year) and paid not more than a fifth of its income (\$25 a month) for rent. But if the family had to pay \$35 a month for rent it would be \$10 short on its

monthly household budget. The situation would, however, be much more critical if the family's income dropped to \$100 a month, for at that level it would not even be possible to pay the theoretical one-fifth of income (\$20 a month) and at the same time meet the required living standard at \$80 a month. It is evident, in fact, that there is a critical income level below which the familiar rule-of-thumb must be applied with considerable discretion. This critical margin is at a different level for families of different sizes and rests upon the recognition of a "standard" of living. Is there any such recognized standard against which it is possible to measure deficiencies and requirements? What significance can be attached to such arbitrary standards in planning the solution to Canada's housing problems?

The definition of a standard of decency and health is no easy matter because at every income level people will habitually declare that they could not possibly get along with less. While the possession of an additional slice of bread might be regarded as relative affluence by a starving European, yet a Canadian may feel that he is suffering some deprivation if he cannot purchase an additional bottle of rye whiskey. Standards of judgment change with the fluctuations of culture and the circumstances of the time and environment. Some may even doubt whether our kind of civilization has really raised living standards. Is it possible that the peasant family, breathing clean air and eating the fresh fruits of the land, had a richer life than the crowded inhabitants of the present industrial city? The process of urbanization cannot be justified unless we provide the industrial wage-earner with greatly improved housing and restore to his family the enjoyment of open spaces and access to the pleasures of the rural landscape.

Before the war the League of Nations made some attempt to define minimum standards of civilized living, particularly with reference to nutrition. The United Nations Organization is making similar attempts. While in the present unstable condition of the world it may not yet be possible to recognize standards common to many different races and environments, yet within our own more or less homogeneous society we are free to define our own

minimum standard of living and can compute its cost. Canada has, in fact, gone a long way in this direction. All our measures of social security, all the striving to raise wage-rates and maintain a balance with the costs of living, all the health and welfare services of a community, all these efforts are inspired by a tacit belief that there is a decent manner of living to which our neighbours and fellow-citizens should be able to conform. We are moving towards the definition of a standard. It is not the bare minimum on which human life can be sustained and work performed, a standard measured in minimum calories and minimum shelter. It is a standard on which a family may live with the dignity appropriate to citizens of a thriving country.

In 1938 the Welfare Council of Toronto undertook a detailed study of the cost of living in the city in order to provide "some standard by which to measure the adequacy of income and to analyse the way in which it is being spent." A report was published in 1939; a revised edition appeared in 1944 taking account of the price changes that had occurred in the intervening years, and amendments have been published for May, 1947 (Table XX). This important document has received national recognition and may be regarded as this community's attempt to determine a standard of living. It is not too liberal a standard. The sums allocated to food expenses necessitate expert housewife management. The allowance for medical and dental care is admitted to be inadequate, no provision has been made for maintenance in old age, and the savings allowed are modest in relation to the unforeseeable needs of family emergencies. The provision referred to as "Advancement and Recreation" permits of only a narrow range of interests. And finally, a somewhat serious limitation, the budget assumes that the household is already a going concern in possession of a stock of furniture and household equipment; for newly married couples who are starting to keep house the present cost of acquiring those essential simple possessions is a familiar and heavy item on the budget.

The cost of maintaining the standard of living established by the Toronto Welfare Council is shown, in its simplest form, in

Table G. Approximate figures are shown for families of various sizes with adjustments made for the price changes between 1941 and May, 1947.

TABLE G

MONTHLY COST OF MAINTAINING STANDARD OF LIVING SET BY TORONTO WELFARE COUNCIL (EXCLUDING RENT)

Family Size	1941	1944	1947
2 adults only	\$ 61	\$ 67	\$ 74
" and 1 child	80	87	97
" and 2 children	96	105	117
" and 3 children	113	124	139
" and 4 children	131	144	161
" and 5 children	148	162	183

These figures, however, are merely generalizations since the cost of supporting actual individuals varies with their sex and age, and therefore families of the same size may have widely varying minimum costs. Age variations cause much wider cost differences than sex. The cost of living for persons of either sex increases with age until maturity and remains substantially the same through the prime of life, declining ultimately with the relative inactivity of old age. Sex introduces a quite minor variation. Boys, as a rule, eat more than girls, and wear out more clothing in their younger years, although after the age of seventeen a girl's clothing requirements are more expensive than a boy's. Similar variations apply to adults. A working man occasions more expense than his wife on food and clothing. He must also save more, since a proper minimum budget should permit the breadwinner of a family to carry life insurance.

Although the sex of children may not have a very substantial influence on family expenses yet the age composition of the family may vary costs considerably, to such an extent that a family having a number of children in the lower age group is actually less expensive to maintain than a smaller family with older children. For instance, three children aged two, four and seven can be maintained at less cost per month than two children aged fifteen and seventeen. This may be rather an illusion, however, for in

ten years' time the larger family will have greatly increased expenses, whereas ten years earlier the smaller family enjoyed the cheaper costs of children in the lower age groups. When the family living costs are viewed over a long period of time, as they must be in any calculation of living costs, the factor of age composition loses its importance as an influence on total expenses. It affects the distribution of costs in time but not their total amount. In the long run family size exerts an effect on total family expenses that is not influenced by the age distribution of a family. It is appropriate therefore to think of family size as the principal determinant of family living costs, and to think of all families of a given size as having the same age distribution. This procedure at least simplifies the analysis and focuses attention on the more important considerations.

TABLE H

ANNUAL INCOMES REQUIRED TO SUPPORT FAMILIES AT TORONTO WELFARE COUNCIL'S STANDARD OF LIVING

Family Size	Annual Costs of Living (Less Rent)	Proportionate		Income Required (Without Family Allowances)	D
		Rent (One-quarter of A)	Total Annual Expenses (A plus B)		
2 adults only	\$ 888	\$222	\$1,110	\$1,110	
" , 1 child	1,164	291	1,455	1,381	
" , 2 children	1,404	351	1,755	1,606	
" , 3 children	1,668	417	2,085	1,862	
" , 4 children	1,932	483	2,415	2,141	
" , 5 children	2,196	549	2,745	2,430	

On the basis of the family budgets shown in Table G we are able to formulate a statement of the annual incomes that are required by families of various sizes in order that they may be enabled to live at the desirable Toronto standard without paying more than one-fifth of their incomes for rent. Since family allowances represent a substantial supplement to incomes a distinction has been made in Table H between the total expenses that must be met and the actual income required to meet those expenses.

A family with two children, for instance, would have annual expenses of \$1,755 to maintain the standard but, in view of the receipt of family allowances, would require an earned income of only \$1,606. With four children the cost of maintaining the standard and paying proportionate rent would be \$2,415 and the earned income necessary would be only \$2,141. From this it is evident that the introduction of family allowances has brought within reach of the Toronto standard a very large number of families who would otherwise have had to reduce their budgets either for housing or for other household necessities.

In order to give an accurate statement of the earned income required to maintain the Toronto standard of living it is necessary to make a still further adjustment for income tax. Gross incomes are subject to a tax which varies with the level of income and with the size of the family. When incomes are transformed by income taxes and by family allowances they yield the figures shown in Table XXI. This table represents successive levels of earned or gross income and the actual incomes received by families of various sizes when the necessary adjustments for family allowances and income tax have been made. It is on these adjusted income figures that budgets and rent capacities must be based.

At lower income levels, where income tax is not effective, family allowances increase earned incomes by the full extent of these payments. At upper income levels, where family allowance payments are negatived by income tax, the available income is, of course, less than earned income. But in between these two are the middle income families which both receive an increment from family allowances and are also subject to income tax deductions; for each family size there is an income level at which those two adjustments cancel one another out and leave earned incomes just as they are, unaffected by either family allowances or income tax. Families above this line have spending incomes less than earned incomes, while families below this line have more funds available than were earned. In Table XXI this line of demarcation is indicated by the broken stepped-line.

Considerably lower than this line of demarcation is the mini-

mum level of adjusted incomes at which families of various sizes are able to support Toronto's basic standard of living and also pay 20 per cent of their income for rent as this has been shown in Tables G and H (and in greater detail in Table XX for a family of two adults and three children). This is a datum line of considerable significance in our study of family capacity to pay for housing. It is a broad delineation of that margin below which housing costs become dangerously excessive. For it is argued that families which fall below the standard line are placed in an untenable position; if they have to pay a fifth of their income for rent they cannot at the same time live up to the standards of health and home management which the people of this community expect. The struggle to maintain these standards must inevitably set up stresses on family health and behaviour. It is largely these physical and psychological stresses which give rise to the high incidence of ill-health and delinquency in low-income housing areas; it is the nature of the family's economic situation as much as the poor quality of the housing itself which produces those maladies so expensive to the community.

If it should be regarded as the ultimate goal of this community to enable all its families to achieve the standard of living that has been defined by the Toronto Welfare Council, then it would be necessary to revise the generally accepted belief that even the lowest income families can afford to pay one-fifth of income for rent. There is a critical level above which families can afford to pay one-fifth of income for rent and *also* maintain a desirable standard of living. It may well be argued that the true rent capacity of families below this level is not one-fifth of income, but only what remains after the costs of maintaining the desirable standard of living have been met.

This critical level has been broadly defined in Table XXII. This table gives the same distribution of incomes and family sizes that is shown in Table XXI, but net incomes have here been converted into rent capacity (one-fifth of the figures for net income). The critical level is shown by the heavy stepped-line. Below this standard-of-living datum line figures are shown in brackets; these

are in each case the balance remaining after the standard costs of living have been paid. A family with three children, for instance, and an earned income of \$1,800 would have to pay a monthly rent of \$33 in order to conform with the one-fifth-of-income formula; but if this family lived up to the desirable Toronto standard it would only have \$25 a month remaining for the payment of rent. With the addition of another child to the family the theoretical rent capacity would increase to about \$34 on account of family allowances received; but if this family continued to conform with the living standard its ability to pay rent would really be reduced to about \$10 a month.

Apart from those families whose incomes and size definitely place them below the margin of the standard line, it must be recognized that any near approach to this line may place a family in precarious circumstances. For the Toronto standard is not one that establishes a generous or ample life but one which requires considerable perseverance and conscientious management on the part of the housewife. Any serious hiatus in earnings or any unforeseen call upon family finances would entirely upset the budget. Take the case, for instance, of a family earning the average industrial wage in the Toronto area (\$34 a week, January, 1947) giving an annual income of \$1,768. On the birth of their first child the parents might well feel that they were able to buy a small house and might undertake to pay off a mortgage at the rate of \$28 a month which would be well within their capacity. On the birth of a second child this cost would still be manageable but a third child would be a rash undertaking; it would place the family well below the margin of safety and wipe out any reserves there might be against periods of sickness and unemployment. This illustrates the danger of a housing policy which encourages home-ownership amongst families whose incomes are just theoretically adequate to carry the monthly instalments on a mortgage.

We have attempted here to appraise the real validity of the commonly accepted formula for rent capacity. This formula was never, of course, more than a convenient generalization and we have seen that the lower income families have habitually had to

pay much more rent than the formula prescribed. It may be said that the standard of living defined by the Toronto Welfare Council is an equally arbitrary formula which could not possibly be used as a precise basis for determining rent capacity. It must be confessed that the attempt to reduce family needs to a classified budget is a denial of the manifold varieties of human nature. While the desire for security persuades us to accept the conventional standards of our community, the equally vigorous urge for freedom of individual expression makes us all resist such uniformities. The idiosyncrasies, vanities, pleasures, and generosityes that make life worth living cannot be accounted for in scientific budgets and economic formulae. But even this cold examination of minimum family needs has shown the many variable factors that must enter into household plans; it is clear that simple generalizations and rules-of-thumb for calculating a family's capacity to pay for housing may be quite misleading. We may at least accept the general proposition that a family should not have to pay so much for shelter that the basic standard of living is threatened. Those who most proudly advertise the economic accomplishments of Canada must admit that we are yet a long way from having removed that threat.

THE SOCIAL AND ECONOMIC FRAMEWORK OF A HOUSING PROGRAMME

In planning a housing programme it is necessary to define the principal characteristics of the population for which housing must be supplied. One type of community may be characterized by its wide variations of income, while in another the great majority of the people may fall within a comparatively small income range. Or the community may be typified by the concentration of large families at low incomes. Obviously such characteristics have a significant bearing upon the types of houses that must be designed and the ability of the community to maintain an adequate supply. An examination of the income and family size structure of metropolitan Toronto's population is an essential introduction to the conception of a housing programme for Toronto. Tables

XXIII and XXIV depict the income levels and family sizes into which the population of metropolitan Toronto was distributed in 1941. In Table XXIII these are expressed as percentages of the total metropolitan family population while Table XXIV gives a numerical distribution of families. For this purpose it has been assumed that the post-war population of metropolitan Toronto contains about 200,000 families as distinct from persons not living in family groups. In 1941 there were 563,000 persons over the age of twenty-five (in the Toronto metropolitan area) and 419,000 married persons. It may therefore be assumed that there were about 144,000 single persons over the age of twenty-five. To this number may be added a considerable proportion of the 80,000 persons between the ages of twenty and twenty-five who were not married but who no longer lived in their parents' homes. There would thus be approximately 200,000 single persons in the area living as lodgers or as tenants of apartments, duplexes, etc. The 200,000 families in the area represent a population of about 750,000 (at an average of 3.76 persons per family). The population in families and the population of single persons together make up the metropolitan population of about 950,000.

In Tables XXIII and XXIV it may be seen that the largest concentration is that of the one-child families with incomes between \$1,000 and \$1,500—nearly 14,000 families or 6.8 per cent of all the families in the area. One may achieve a certain sense of proportion by observing that less than a tenth of this number is found in the group of one-child families with incomes between \$4,000 and \$5,000.

The distribution shown in Tables XXIII and XXIV may be regarded as the type of basic social-economic framework on which a comprehensive housing programme for the Toronto area must be constructed. The figures do not include, however, about 200,000 single persons who do not form parts of family groups but who must be taken into account in order to complete the description of the metropolitan society for which the housing programme must be designed. Since these distribution tables are derived from the 1941 census they cannot be used with any

validity in combination with 1947 costs of living and costs of housing. For instance the application to Table XXIII of the standard of living datum line (developed in the previous section of this chapter) would suggest that about 40 per cent of all the families in the Toronto area fall below this line. But the general level of incomes has risen since 1941 to such an extent that probably not more than 30 per cent of all families are below this datum line. If a datum line is established on the basis of 1941 costs of living (shown in Table G above for families of different sizes) and applied to Table XXIII, it is found that in 1941 more than 25 per cent of all families in the Toronto area were absolutely below the standard line. It may be assumed that this proportion remains about constant since it arises from the relationship between incomes and costs of living. It may therefore be said that between 25 and 30 per cent of the families in the area are not able to pay one-fifth of income for rent without jeopardizing their standard of living.

The lack of economic and social data applicable to 1947 conditions suggests that there is an urgent need for a large sample survey which would make it possible to construct social-economic tables similar in form to Tables XXIII and XXIV. Without such contemporary evidence it is impossible to measure the real limits of the community's housing problems. Unless the community's present capacity to pay for housing is known with some degree of accuracy it is extremely difficult to plan a programme which would accomplish the desired results.

With the limited knowledge at our disposal it is possible to make certain broad generalizations about the framework of a housing programme for the Toronto area. For this purpose the population may be divided into five principal groups:

- (a) Families who have at least one child and whose incomes enable them to buy the kind of house they need.
- (b) Families who have at least one child but whose incomes *do not* enable them to buy a house though they are able to pay one-fifth of their income as rent.
- (c) Families who have at least one child and whose incomes

and family size prevent them from paying a proportionate rent and also maintaining a desirable standard of living.

(d) Married couples without children.

(e) Single persons not living in family groups.

(a) *Families able to buy new houses.* As a basis for calculating the number of families who can afford to buy a new house let us assume the minimum cost of a dwelling to be \$6,000 and let us assume the ability of families to make cash payments of \$2,000; the cost of the principal and interest on a National Housing Act loan together with the payment of taxes on such a house would then amount to about \$34 a month. Group (a) therefore contains all those families with children who are able to make monthly payments of at least \$34. A study of Tables XXII, XXIII, and XXIV indicates that about 33 per cent of all the families in the Toronto area, or about 66,000 families, may be in such an economic position. This might be regarded as an underestimate in view of the general rise in incomes between 1941 and 1947; but this may well be offset both by the limited number of families who have been able to retain savings of \$2,000 during a period of high living costs and by the difficulty of obtaining a new house for \$6,000. The estimate cannot therefore be very far from the truth.

It is upon the economic demand of this group of families that the community depends for the supply of new single-family homes built for owner-occupation. It must be recognized that a large number of these families, perhaps the majority, are already quite adequately housed, and only the remainder offer the effective demand for new houses. Even if a third of all these families, about 20,000, were to buy new houses during the next ten years it can be seen that this supply would not go very far towards supplying the estimated need for 50,000 additional units.

(b) *Families able to pay proportionate rent but not able to buy new houses.* With a lower rent-capacity than group (a) are those families which can afford to pay one-fifth of income for housing, but which are unable to contemplate the purchase of a new house. Since families in this group are able to pay an eco-

nomic rent, they are in line to occupy the used housing handed down to them from group (a). At present when comparatively few houses are being built for group (a), only a very small number of houses can become available to group (b). In the Toronto area about 15 per cent of all families (about 30,000 families) are in this category.

(c) *Families unable to pay proportionate rent and maintain a desirable standard of living.* Of all the families with children we are then left with those who fall below the standard line which has been established. Upon these families fall the greatest household problems in their attempt to raise children under suitable conditions. This group contains all the families with
1 child, an income below \$1,400, a rent capacity less than \$25
2 children, an income below \$1,700, a rent capacity less than \$30
3 children, an income below \$2,000, a rent capacity less than \$36
4 children, an income below \$2,300, a rent capacity less than \$40. This group may represent about 30 per cent of all the families in the area and may embrace about 60,000 families. These families cannot occupy new accommodation either by ownership or rental and are dependent upon the existing stock of housing supplied by previous generations of house purchasers and handed down for their use. In a period of housing shortage this is the group most tightly pressed because there is not enough housing to be handed down for their use and the rents of the available stock are maintained at a level beyond their real capacity.

(d) *Married couples without children.* About 22 per cent of the families in the area are married couples who either have not yet started to raise a family or whose children have already grown up and left the home. These childless families (about 40,000 in number) are normally tenants in apartment houses or duplexes. Their needs do not stimulate the production of new houses for owner-occupation; they are dependent upon the supply of rental housing. Although their housing requirements are not so immediately pressing or so inflexible as those of families with children, yet appropriate accommodation must be provided in the neighbourhood communities of which they form an integral part.

(e) *Single persons not living in family groups.* In addition to the families with and without children there are about 200,000 individual persons in the area who have to be housed either as lodgers or in non-family household groups renting apartments or duplexes. Like the married couples without children they do not help to stimulate the production of houses for owner-occupation. As lodgers some help to supplement the rents of families and some keep professional lodging-house operators in business; the more effective earners are able to occupy apartments. This is a fluid element in the rental population, inclined to move frequently under changing income circumstances and on account of impermanent social attachments. In periods of full employment, as during the war, the economic demand of this group placed additional pressure on limited housing accommodation; in periods of recession this is the most vulnerable part of the population and the withdrawal of its effective demand causes vacancies in rental housing.

Chapter Five: HOUSING SUPPLY AND ORGANIZATION

THIS study began in Chapter 1 with an attempt to define the broad objectives of a national housing programme. It was assumed that the ultimate aim of housing policy was to provide a decent separate dwelling unit for each Canadian household. The economic circumstances under which this task would have to be accomplished were then discussed in Chapters II, III, and IV, using the Toronto metropolitan area as an example, and as a source of statistical material. Calculations were made to show the number of replacements and additional housing units required in the area; the costs of producing housing were related with the financial capacity of the families for whom housing must be supplied. The resultant problem faces us: "How is the community's need for housing to be satisfied?"

THEORY OF THE HOUSING MARKET

The amount of new housing which a community obtains is normally governed by the forces of supply and demand which create the "housing market." Although this economic process is similar to that which governs the price and output of other goods and services, yet the housing market is subject to such a multitude of conflicting and variable influences that it is not at all easy to define its operations in simple terms or provide a facile explanation of what is happening or what may cause a failure of supply. This difficulty arises largely because money spent on housing is really divided between two separate but closely related markets, that for old and that for new housing.

Whenever the costs of new housing increase, money is withheld from that market and flows back into the market for old housing, raising the prices and rents of old houses. Conversely

when the costs of producing new houses decrease, then money flows back into that market and the rents of old houses tend to decrease accordingly. Or expressed in another way, it may be said that whenever the amount of money spent on living in old houses is, on the average, high in relation to the cost of constructing a new dwelling, then the supply of new houses will respond and, as the total number of units increases, rents will gradually decline until a kind of equilibrium is established. It is a recognition of this economic principle that, in our present housing shortage, has led some people to advocate that controls on rents should be removed so that demand would shift from the old-housing market into the market for new housing and so the building of houses would be accelerated. (To bring this about without a general raising of income levels would imply, of course, that families would have to pay a larger proportion of their incomes for housing and would consequently have less to spend on other household needs.) In such a free situation an equilibrium would be established when rents had levelled off with the prices of new housing. For it should be realized, of course, that the kind of equilibrium which arises through such a free interplay of the two housing markets, the old and the new, is an entirely economic equilibrium, tending to balance off the *price* of old housing with the *price* of new housing. It is not an equilibrium established between the *numbers* of dwelling units and the *numbers* of families or households. If the cost of constructing new housing is very high and beyond the reach of all but a small proportion of the community, then production might be cut off long before a shortage had been overcome, leaving rents balanced off at an equally high level. For in this relationship between the prices of old and new housing, it is the price (or rents) of old housing which is the variable or flexible element, while the price of new housing is a relatively fixed quantity based on the costs of labour and materials.

The operations of the housing market may also be described in a somewhat different way. The residential construction industry, responding to the demand of those who can afford to live in

new houses, has had to devote itself almost exclusively to filling the requirements of the comparatively well-to-do families. As these families have moved into new houses in new neighbourhoods they have sold or rented their old houses for the occupation of those in lower income levels. There has thus been a continuous flow of new housing into the possession of the upper third and a continuous recession of older dwellings down the social scale. This has been called the "filtering-down" process. It is argued that the normal and most economical way of housing low-income families will always be through the construction of new housing for those who can afford it, on the assumption that they will vacate equivalent accommodation which can then be occupied by families with smaller incomes. In practice this procedure has not always worked satisfactorily because the rental values of old houses have not been consistently and proportionately reduced in the process of filtering down, with the result that low-income families, as we have shown in a previous chapter, have habitually had to pay more than they could afford for their accommodation. In a larger sense it may be said that the filtering-down process has demonstrably not proved satisfactory; the flow of houses down the scale has not been of such volume that it has been possible to take the oldest houses out of circulation and move low-income families into more contemporary accommodation. This must be, after all, the crucial test of the adequacy of housing supply in general and of the filtering-down process in particular.

From whatever point of view one may examine the complex and somewhat obscure operations of the housing market, it is at least clear that all new housing must be paid for ultimately out of the incomes of households in the community. The amount of new housing construction is in fact directly related to the national income. This can be clearly seen in Table XXV where levels of national income and the volume of residential construction are shown for the period 1919 to 1941. The two indices rise and fall more or less together; when national income has been higher there has been more housing produced. In Table XXV are also shown the movements of building costs; though these have tended

to move in the same periodic cycle as the other indices, yet the changes in building costs have been far less marked than the fluctuations in income and volume of construction. The fact that building costs have fluctuated less than income has created a varying differential between the two; it is this changing relationship between costs and incomes that has largely determined the extent of the market and has caused the periodic changes in volume of construction. One would expect to find that more new housing would be built whenever incomes were high in relation to building costs. Table XXV confirms this expectation. The volume of new construction has, in fact, reacted very violently to this relationship between costs and incomes, giving a peak of production in 1928 and a trough in 1933.

The proportions of the market for new housing are determined by the numbers of households which can afford the current costs of production. Normally it has been during periods when the upper income group has been receiving relatively higher incomes that residential construction has been stimulated and so all economic levels have benefitted from the increased supply through the filtering-down process. On the analogy of the market for automobiles it may be argued that the raising of incomes at lower economic levels would have substantially the same effect, for their improved economic circumstances would enable them to offer the well-to-do more for their second-hand houses as they offer more for second-hand cars; this would theoretically reduce the cost of new housing for the well-to-do since their expenditure may be considered to be the cost of a new house less the price or rent obtained for the old one. This consideration leads to the conclusion that a rise in the income of the community as a whole, however it may be distributed, must have the effect of stimulating construction and so directly or indirectly benefitting all classes. The significant feature in the creation of the housing market would therefore seem to be the average of all family (or household) incomes or, more precisely, the relationship between this average and the current cost of paying for the construction of a new house.

But this academic interpretation of the housing market does not reflect actual experience. It is true that families which can afford to do so frequently buy a new car every year or two; that is an easy turnover to make. But a home containing all the household effects and neighbourhood associations is a long-term possession, and a family will not usually buy a new house more than once during its existence as a family group. Even though there may be a strong demand for second-hand houses by those just below the market for new houses, yet families already quite comfortably housed will not respond to this demand by obligingly moving out and building new houses.

The fact is that the new housing market is limited not only to those who can afford a new house but is normally limited also to those families which are in the process of establishing themselves as family groups. This is an important limitation. For supposing a third of the families in the community had incomes which would enable them to buy new houses, this would not mean that a third were "in the market" since many of these families are already quite comfortably established and have no reason or inclination to move. It would be nearer the truth to state that the market for new housing is limited to those who are positively seeking or needing housing accommodation and also have the financial ability to occupy a new house.

In comparing the housing market with the markets for other kinds of durable commodities, another consideration arises. People are induced to buy new cars and clothes and household equipment not only because what they already possess is worn out but because new products are more efficient or more attractive or more fashionable. The whole battery of the advertising business is brought into action to create a desire and a market which might not otherwise exist. It would perhaps be fair to say that the type of house which the building industry has recently been able to produce in Canadian cities has been so lacking in fine qualities or architectural design that there has been little to attract buyers beyond the bare necessity to acquire a house. The large potential market for all those who can *afford* a new house, a number far in

excess of those within this group who are actually in *need* of a new house, has been very inadequately exploited. People only want to buy new houses or live in new apartments if the accommodation is more spacious, better planned, and in a more desirable neighbourhood than where they already live or if the new accommodation is superior to any older dwelling unit which they may be able to obtain. Unfortunately the building industry has failed to improve its products to such an extent that new houses offer sufficiently evident advantages over older houses; there have certainly been advances in the design of the mechanical equipment for heating, ventilating, cooking, and cleaning but the space, structure, and character of new housing cannot be compared very favourably with the products of a previous generation. It is certainly fair to assume that with the aid of skilled architectural designers and imaginative neighbourhood planning it would be possible to attract into new housing areas many households which at present find the amenities of the older parts of town more congenial. New neighbourhoods have been brought to completion in an altogether too haphazard, piecemeal manner and during the process of development have been exposed to all kinds of uncertainties and risks in the provision of services. To buy and move into a new house has not therefore seemed to be a particularly attractive undertaking.

In the interests of the whole community it is most important that the full potentialities of the economic housing market should be exploited. Those who are in a financial position to buy a new house must be encouraged to do so rather than buy old houses and thereby place a heavier load of housing production on those who can less well afford it. As the shortages of materials and hazards of building ease off during the coming months it may even be regarded as the obligation of certain families to initiate home-building. But in order to expand this market the joint efforts of the builders, the architectural profession, and local planning boards will have to be enlisted in order to modernize the products of the building industry. The new single-family home and its setting must be made an altogether more desirable possession.

It has been suggested in the previous chapter that there are about 66,000 families in the Toronto metropolitan area who might be able to meet the cost of living in a new dwelling. It certainly cannot be assumed that at some time during the next ten years every household in this top income group would be directly or indirectly responsible for the construction of a new housing unit to give an average annual production of 6,600 units. It would, in fact, be most optimistic to anticipate a market for more than half this amount even if the building industry could produce a house of the most revolutionary character which would push the market to its limits.

But metropolitan Toronto needs to produce additional housing units at the rate of 5,000 a year during the next ten years, in addition to which it must also embark upon a programme of replacements, rising ultimately to a volume of at least 1,000 units a year. It is evident that such a programme cannot possibly be carried out by means of the "filtering-down" process alone.

SUBSIDIES TO SUPPLEMENT THE HOUSING MARKET

It is fairly evident that the market for new housing will not be sufficient to fill the entire needs of the community. Building costs and the distribution of income offer fairly well-defined limits to the market. By some means or another these limits must be changed.

Some expansion of the market may undoubtedly be brought about through technological research leading to better methods of construction and a more economical organization of building operations. In the public mind prefabrication offers the most hopeful prospects of revolutionizing the relationship between incomes and housing costs. But up to now these hopes have proved all too elusive. One of the most eminent authorities on building technique, Professor Walter Gropius, has said: "People look upon prefabrication as an entirely revolutionary idea, but from very extensive experience with prefabrication—I began my experiments in 1910—I have come to see it as a slow, evolutionary break, despite all the misleading advertisements promising John

Doe a Sunday-magazine miracle-house when he comes back from the war."¹

If reductions in construction costs alone cannot bring about an adequate volume of production, then it becomes necessary to consider how the income factor might be modified. The general level of incomes is, of course, a matter beyond the province of housing policy, as such. Those who are concerned with housing policy obviously cannot influence either the total income of the community or its distribution; these are determined by economic factors most of which are quite independent of housing. Nor, in the light of what has been stated above, would it be wise to advocate that families should spend a larger proportion of their incomes on housing—certainly middle- and low-income families could not be expected to do so. But even if it is not possible, through housing policy, either to raise the community's total income or increase the proportion of income spent on housing by lower-income families, yet it is possible to influence the income factor in one most important respect. This may be done through a system of housing subsidies, a system which has been extensively practised in other countries faced with a similar situation. (The fact is, of course, that the inadequacy of family income in relation to the costs of housing accommodation is a phenomenon not peculiar to Canada alone, but is a characteristic of industrial civilization as a whole.) In other countries, notably Great Britain and the United States, the state has entered directly into the housing market to subsidize the rental payments of low-income families who could not otherwise afford the housing accommodation constructed for their use. The nature of the economic process which thus takes place may be briefly explained as follows:

The public funds required to pay housing subsidies must be raised through taxation and therefore represent reductions in the incomes of upper-income families. Left in the possession of these taxpayers, some part of the sum thus raised, possibly a fifth, would perhaps have been spent on housing; but most of it would have been spent on other items of their household budgets. Transferred

¹Walter Gropius, *Rebuilding Our Communities*. (Chicago, 1945).

to the state; however, the whole of this particular revenue can be concentrated upon the production of housing. In Great Britain and in the United States the usual method of applying this subsidy fund has been by payments made to a local housing authority which owns and operates housing rented exclusively to low- and moderate-income families; the subsidy payments *plus* the rent revenue are together sufficient to meet the total costs of such housing. Without such supplements to the incomes of these families such new housing could not be brought into production because these families are not in the economic market for new housing. In this way, although the total income of the community has not been changed, there has been an increase in the proportion of that total income available for the production of new housing.

The purpose of a subsidized housing programme is to increase the supply of housing units at any time and under any circumstances when income levels are insufficient to meet the current costs of housing construction, and the necessary volume of production cannot therefore be maintained. A study of the facts concerning income levels and costs seems to suggest that such a situation is chronic and that a failure of the housing supply in Canada, and in Toronto particularly, will arise before the present shortage has been overcome. A system of housing subsidies may thus have to become a most important instrument in the hands of housing policy-makers since it provides a well-tried means of increasing the supply when technological improvements have reached their limit in reducing costs. Whatever may be the social or ethical arguments for or against a redistribution of incomes it can at least be said that a properly administered system of housing subsidies offers one method of abbreviating a housing shortage. Furthermore, a subsidy used to supplement purchasing power and so bring more customers into the housing market, is likely to disturb the normal operations of a country's economy considerably less than that other form of stimulant, a subsidy paid to the producers of building materials. This latter form of subsidy, besides being extremely difficult to operate without insidious choices of re-

cipients, may influence the market price of certain commodities without insuring that the additional amount of housing accommodation so created will actually be commensurate with the amount of subsidy paid. The undoubted advantage of a subsidy paid directly to supplement rents of low-income families in housing constructed for the purpose lies in the fact that the subsidies need only be paid as and when the additional housing units actually come into existence.

The fact that housing subsidies may be used to increase the production of housing units, and so benefit the community as a whole, is a thesis that may be accepted quite apart from the question as to who should be the immediate beneficiaries of such subsidies and rent benefits. The policy determining rent levels and the selection of tenants may arise out of the particular circumstances under which a project is constructed. During the course of time a community's housing programme may pass through several phases in each of which it may be appropriate to give priority to different categories of households. During the war, for instance, the public housing projects of Wartime Housing Limited were specifically reserved for the accommodation of the families of workers in key industrial plants. Following the war, Wartime Housing Limited has given priority to the families of veterans with children. During subsequent phases of the programme it will probably be necessary to give priority to families to be removed from slum areas of the city. Other circumstances, at present unforeseen, may direct that other groups in the community should be given the benefit of accommodation in subsidized projects, providing always that they are families which could not otherwise finance the production of new housing. In other words it is possible to detach the general principle of housing subsidies from the discussion of the particular way in which they may be applied. In the actual operation of housing subsidies both in Great Britain and in the United States they have almost invariably been applied to housing projects designed for families in the low-income group rather than for that very extensive proportion of middle-income families who cannot afford new hous-

ing. This has, of course, been primarily because the subsidy provisions and low-rental housing legislation originally came into existence in response to public pressure for an improvement of the housing conditions in slum areas. Before the recent war both British and American legislation contained the principle of "equivalent elimination" to provide that subsidies would in fact only be forthcoming where poorly housed families had been moved from demolished slums and re-housed in better accommodation. But although the British housing subsidies have been administered with this humanitarian point of view, yet the inception of the programme after the previous war, in 1919, had as its principal motive the need to overcome a housing shortage; in a sense the same may be said of the years immediately preceding 1939 when the elimination of overcrowding, the principal manifestation of a housing shortage, was the objective of all public housing authorities.²

But it is quite logical that objection should be raised to the policy of benefitting the lowest income group through housing subsidies. Why, it may be asked, confuse housing policy with welfare policy? Why should the new accommodation provided through the application of subsidies not be used for housing that large element in the middle group whose incomes are not quite sufficient to meet the current costs of new housing but who, with the assistance of a subsidy, would be able to open up a new market for housing production? Would not such a policy be more economical in that smaller subsidies would be required to lift these families above the line at which construction costs are pro-

²Between 1919 and 1939 over four million houses were built in Great Britain—over a million by local authorities, about 433,000 by building societies and other agencies aided under the housing acts, and the rest by private builders (many of the latter in co-operation with local authority schemes). The subsidies granted for housing built by local authorities were contributed both by the municipalities themselves and also from the national exchequer. The capital expenditure provided by local authorities was £538 million. By 1939 the annual subsidies to which local authorities were committed amounted to £3,800,000 and the subsidies being provided annually by the national government amounted to £15,300,000. Therefore the total annual subsidy being paid towards housing low income families of Great Britain just before the war was £19,000,000.

hibitive? Besides, it may be argued, new housing built for middle-income families can be filtered down to the low-income group but the reverse process cannot take place. In order to justify the application of subsidies to the benefit of low-income families it is certainly necessary to examine those objections. It may be said, in the first place, that subsidized public housing should not be allowed to compete with the efforts of private enterprise to serve an increasing range of income groups; it must always remain the objective of private enterprise to reduce costs and eventually take over the whole of the potential market represented by the needs of the middle-income group. It has seemed, therefore, advisable for public housing to keep well clear of the legitimate field of unsubsidized housing business.³ However, the principal objection to offering subsidies for middle-income housing is simply that it would become impossible to define the limits of operation under such a policy. Once the precedent had been set there would be an inexhaustible number of equally legitimate claims for subsidies. By implication half the community would become eligible for such benefits. For this reason experience has shown the wisdom of attaching housing subsidies closely to the concepts of public health and welfare. In this way it becomes possible for public housing to establish its starting point, define the limits of its programme, and embark upon a consistent course of action. It thus may become the normal business of public housing to raise the minimum standards in the community by the successive retiring of the most obsolete accommodation in the area and the substitution of modern housing. Even when the immediate situation calls for an absolute increase in the number of units, as well as the elimination of slums, it is still possible for public housing

³To prevent subsidized public housing from trespassing upon the territory of private enterprise, the abortive Wagner-Ellender-Taft Bill presented to the last United States Congress contained the provision "that a gap of at least 20 per cent [should be] left between the upper rental limits for admission to the proposed low-rent housing and the lowest rents at which private enterprise is providing [through new construction and existing structures] a substantial supply of decent, safe and sanitary housing." (Bill S. 1592, title VII, sect. 701 (6) (11); 79th Congress, 1st Session.)

to start from the same point of reference. The use of public funds for subsidy purposes may thus be given a double justification; an economic justification in its contribution to the total number of housing units, and a social justification in its preservation of standards of living.

In Great Britain and in the United States rent subsidies are paid exclusively in publicly owned housing projects. Houses are constructed and owned by the housing agencies of municipalities and rented at less than economic rentals, the difference between the rent revenue and the actual cost of financing and operating the projects being paid out of public funds specifically voted for that purpose by Act of Parliament or Congress. In order to place financial as well as administrative responsibility upon the local governments and their housing agencies it has been customary also to require that a proportion of the subsidy fund should be raised locally. The New York City Housing Authority may be quoted as an example of the scale of subsidy payments.⁴ In 1944 the Authority reported that its seven federally aided projects were under contract to receive from the Federal Public Housing Authority annual subsidy payments to the amount of \$1,701,407 which would enable rents to be reduced by an average amount of \$163 per family per year. It is of interest to note that the local authority, by efficient management, had been able to reduce operating costs and therefore had only claimed an average of \$1,385,251 each year, equivalent to \$133 per family per year.

Most of the cost of providing low-rent housing in the United States—including management expenses, repayment of the development loans with interest, maintenance, repairs, insurance, etc.—is borne by the tenants themselves.

But the rents that low-income families can afford to pay do not cover the full cost. Part of the deficit is made good by the Federal Public Housing Authority through a yearly subsidy, called the annual contribution, which is appropriated by the Congress. The amount varies from year to year, depending on the amount needed to keep the rentals within the tenants' reach, but for the total programme it cannot run over \$28 million in any one year. The most that can be paid to any local authority for a year's

⁴New York City Housing Authority, *Tenth Annual Report*, 1944.

operation is limited to a percentage of the project development cost equal to the going federal interest rate plus 1 per cent. For example, on a \$500,000 project with a percentage fixed at $8\frac{1}{2}$ per cent, the top federal contribution in any one year would be \$17,500. . . . At least one-fifth of the annual subsidy paid by F.P.H.A. must be matched by a local contribution. Both the United States Housing Act and the State Laws permit the localities to make their contribution by exempting low-rent projects from taxation, and this has invariably been the method used to meet this requirement.⁵

Various practices have been followed in determining the rents that should be charged. Differences of opinion have arisen among American and British housing officials over the respective merits and disadvantages of two methods of rent determination. Advocates of what are called "proportional rents" claim that no specific rent should be attached to any particular dwelling unit but that the rent required should be proportional to the tenant's income. The proponents of the system of "graded rents" on the other hand, believe that a specific rent should be attached to each dwelling and that rents for identical dwellings should be identical. The term "graded rents" implies that a housing project should contain various grades or standards of accommodation.

The practice of charging rent according to the unit occupied is probably the simpler. The rent of each dwelling is constant, which gives the housing authority a uniform, known income. There are, however, some considerable objections to standard rents. First, this system necessitates moving families from one dwelling to another as their income changes, which in turn requires a large number of dwelling units. Secondly, standard rents may be set within the reach of the average low-income family, but they will not admit the family with exceptionally low ability to pay, nor will they demand any more rent from the better-off among the group housed. Finally, a greater rent is charged for larger accommodation, although the larger family may have less ability to pay.

In England particular conditions obtain which have overcome these difficulties to a great extent, so that there is an increase in

⁵Bulletin of the United States Federal Housing Authority, National Housing Agency, Washington, D.C.

the use of the standard rent system. The considerable public housing programmes of the last twenty-five years have resulted in a large and varied body of municipal housing units, for which differing rents can be charged with validity, and among which tenants are likely to find suitable accommodation. In addition, the increasing social security provisions have shifted much of the burden of dependency and loss of income from the family to the state as a whole, so that there is relatively less need for variations in housing subsidy.

In the United States different conditions have produced the opposite tendency and graded systems are being abandoned in favour of systems based on ability to pay. Canadian conditions are not identical with either of these other countries. In social security measures we are somewhere between the two, but in provision of public housing we are behind both.

The opponents of the proportional rent systems criticize them mainly because these latter feature fairly wide rent differentials between similar types of accommodation. It is maintained that such differentials make the public housing programme serve a welfare and relief function. These critics, although they do not deny the fundamental aspect of public housing as a subsidized service, nevertheless oppose any of its adaptations which permit invidious personal comparisons within projects or which liken it to the granting of relief. The discomforts and stringencies incidental to particular incomes that are too low to provide sufficient food and clothing they regard as the domain of agencies other than public housing bodies.

It is not appropriate here to choose between the systems. Clearly they are not mutually exclusive and any particular local project may blend their features in many ways. The above comparison merely points out some of the difficulties and some of the administrative decisions that must be made in executing public housing policy. Among the chief problems are the following:

(1) At what maximum income level, if any, should tenants be excluded? Should there be a minimum income level disqualification?

(2) Within the project should rents be adjusted to incomes for each individual family, or should equal rents be paid by families occupying the same class of dwelling?

(3) How are adjustments to be made in respect to tenants whose incomes change considerably, after admission to the project?

(4) How often should means tests be made?

Most of these decisions can best be made on a local level, taking into account the local prejudices and attitudes. As examples of adjusted rent systems those employed by the Chicago Housing Authority and the Housing Authority of the City of Newark, New Jersey, are shown in Table XXVI.

THE LOCAL HOUSING AUTHORITY

On January 1, 1947 the taxpayers (property owners and long-term lease holders) of the city of Toronto were asked to vote on the following question: "Are you in favour of the city undertaking, as a low-cost or moderate cost rental housing project with possible government assistance, the clearance, replanning, rehabilitation and modernization of the area bounded by Parliament, River, Gerrard and Dundas Streets known as the Regent Park (North) Plan at an estimated cost of \$5,900,000?" Of the 47,442 votes cast in answer to this question 29,514, (62.5 per cent) voted "yes" and 17,928 (37.5 per cent) voted "no." As the consequence of this decision made by the citizens of Toronto there has come into existence the first local Housing Authority established by a Canadian city. Though the Toronto Housing Authority has been charged with the specific task of building and operating a low-rental housing project on the Regent Park site, its establishment sets in motion a method of procedure which may in the future be used in operating other low-rental housing projects supported by rental subsidies. For the operation of the Regent Park project the municipality has itself assumed the obligation to pay the subsidies that will be required in order to bring the rents within the capacity of families who at present live in that part of the city. The only financial assistance which the muni-

cipality is likely to receive is a 50 per cent contribution from the federal government towards the cost of land acquisition and clearance.

The operation of low-rental housing is virtually a new departure for local governments in Canada; in setting up an organization for this purpose it is therefore appropriate to benefit from the experience of England and the United States.

In Britain low-rental projects are constructed and administered by local governments. The costs of these projects are borne (1) by housing subsidies contributed by the central government, (2) by the smaller contributions from the general revenue of the local governments themselves, and (3) by the rental payments of the tenants. In order to cover the initial capital outlay, the local governments may issue housing bonds for authorized undertakings or they may borrow from the Public Works Loan Commissioner. Administrative procedures for the construction and management of housing is left very largely to the discretion of the local authorities and practice varies widely throughout the country. While some cities maintain a complete and centralized housing department under a housing director responsible for all phases of the housing programme, in other cities housing is administered through several municipal departments with the Estates Committee of the City Council usually guiding the programme as a whole. Where there is not a single housing director it is common for the city architect to do the designing and site planning, the city engineer to let construction contracts, the city treasurer's department to collect rents, and the city clerk's office to manage tenant-selection and house assignment. Such is the variety of practice that has grown up in different English cities that almost every possible variation of method may be found. In general, it may be said that low-rental housing administration is performed within the departmental organization of the municipality, and in this respect differs from the form of organization which may be most appropriate for Canadian cities. It should be observed, however, that in Britain the provision of publicly owned low-rental housing has been developed throughout a long

period of gradually ripening experience. The methods that have been developed in the process of a slow evolution may not necessarily be applicable to the circumstances in the city of Toronto where the very first undertaking of this nature is to be a project of very considerable dimensions. The form of organization that has been adopted in United States cities seems to provide a more suitable pattern for a housing authority for the city of Toronto. This, in fact, conforms closely with the type of commission with which Toronto is already familiar and which has proved very satisfactory in the operation of public utilities.

Municipalities in the United States began to assume responsibility for low-rental housing under the terms of the United States Housing Act of 1937. There are now 479 local housing authorities in existence which administer in all about 669,000 publicly owned housing units. Forty states have enacted special "Housing Authority Laws" and the authorities so established have assumed a fairly uniform character.

These local authorities are not departments of the municipal governments but are semi-independent public corporations with power to issue their own bonds, expropriate property, build and operate housing within the terms of federal and state legislation. Each local authority consists of an appointed board of citizens serving in a voluntary capacity and an employed staff under the management of an official usually known as the Executive Director. In the great majority of states (thirty-three) it is prescribed that the board is to be composed of five members appointed by the mayor of the municipality; there are only minor variations of this system. After the first appointments the members serve for staggered or rotating terms of office. In no case do the members of the boards receive any remuneration except for expenditures incurred in travelling, etc. In setting up these public authorities in relationship to municipal governments in the United States somewhat elaborate precautions were taken to secure the authorities against political and private influence. In most states it is provided that no member may be either an officer or an employee of a municipality. It is usually stipulated that no member

or employee of an authority may acquire any interest in any contract or property associated with a housing project; if he has such an interest it must be disclosed in writing to the authority.

In the majority of states a local housing authority is entitled to own and operate housing not only within the boundaries of the municipality by which it is appointed but also in an area within a specified distance (3, 5, or 10 miles) of the municipality's boundaries. Provision is usually made, however, that a local housing authority is excluded from operating on the territory of any other major city or town that is within this fringe area. Local housing authorities are also established for county areas.

Though originally created to provide and manage housing specifically for low-income families under the terms of the United States Housing Act 1937 (and to assume management of a number of low-rental projects built by the federal government's Public Works Administration prior to 1937) the responsibilities of local housing authorities have been greatly expanded during the war years when they have been given jurisdiction over permanent and temporary housing constructed for industrial workers and veterans through a number of emergency measures. This housing, some of which is not at present strictly speaking low-rental, now represents more than half of all the units under the management of local housing authorities. (For example, the Cleveland Metropolitan Housing Authority administers 4,739 low-rental units constructed under P.W.A. and U.S.H.A., 3,745 units of wartime housing, and 1,200 veterans' housing units. The Pittsburgh Housing Authority has 3,073 U.S.H.A. units and 2,389 wartime units. The Buffalo Municipal Housing Authority has 2,271 low-rental U.S.H.A. units and 1,215 wartime units. Though there is no coherent public housing policy operating in the United States at the present time it seems probable that the local housing authorities will revert to their former specialized role and that the wartime projects of permanent construction will in the future be administered on a strictly low-rental basis. The construction of further publicly owned low-rental projects has been suspended by the failure of Bill 1592 (known as the Wagner-Ellender-Taft Bill) to pass through Congress.

Although the rent revenues of projects administered by local housing authorities are not sufficient to cover the amortisation and operation costs, yet the authorities have financial security on account of the subsidies paid by the Federal Public Housing Authority (F.P.H.A.). For each project that has been initiated the F.P.H.A. has contracted with the local authority to pay an annual sum sufficient to compensate for the low rental levels. The municipalities have contributed their quota of subsidy in the form of remitted taxation on public housing property. On account of this security against financial deficit, the local authorities have been able to obtain operating capital through bond issues at a very favourable rate of interest. Under the terms of the U.S.H.A. the federal government offered to loan 90 per cent of the capital required, the remaining 10 per cent having to be raised by loans from financial institutions and private sources. Confidence in the operations of local housing authorities has, however, made it possible to obtain more advantageous financing by increasing the proportion of private financing. For example, the New York City Housing Authority has refunded bonds issued for six of its low-rental projects costing \$45 million as a result of which 85 per cent of the bonds are now held privately with interest rates averaging 2.128 per cent as against the 3 or 3½ per cent rate which would have been payable on loans made by the federal government. It may be observed also that the financial situation of the local housing authorities has been improved during the war years because tenants able to pay more than the normal low rents have been permitted to stay in publicly owned projects and have thereby increased rent revenues; consequently local authorities have not needed to claim the whole amounts of the F.P.H.A. subsidies to which they were entitled under the terms of the United States Housing Act.

As so often happens in establishing a procedure appropriate to Canadian conditions, it is found that neither American nor English methods are entirely appropriate. It is possible to adopt the best features of the methods used in both countries. In the case of low-rental housing we may not find it either necessary or wise to divorce a housing authority so completely from the muni-

cipal government as is customary in the United States; we are fortunate in possessing traditions of integrity and high performance in both our elected and employed city officials. For this reason, in the establishment of Toronto's Housing Authority, it has seemed appropriate to utilize the essential form of the American pattern (which has proved to be a very satisfactory type of agency and conforms closely with our own type of public utility commission), but to strengthen its links with the city government. This has been effected by the provision that at least one but not a majority of the members of the board of the housing authority should also be members of the city council. Also the invaluable advice of heads of municipal departments has already been made available to the board of the authority; as employed officials of the city, however, they cannot be voting members of that board involved in responsibility for matters of policy. The desirability of appointing an independent authority does not arise in the slightest degree out of any doubt concerning the technical competence of the municipality's officials and their staffs. But it seems particularly important that the administration of low-rental housing should be removed as far as possible from the private and political pressures that will inevitably be brought to bear upon operations of this kind. The acquisition of land, the granting of construction contracts, and the selection of tenants eligible to benefit from low rents are all procedures that should be guided by a responsible body appointed specifically for the purpose; it is essential that no members of this body should seek political office or personal gain through the decisions that are made. The significant feature of the commission form of organization is the placing of responsibility upon a board of citizens who, without fear or favour, may judge the absolute fairness and impartiality with which policies are carried out by the administrative and technical staff employed by the authority.

It will be the function of the board of the local housing authority to represent the interests of the community as a whole in the administration of the community's publicly owned housing. The members of the board will not therefore represent special

groups or have special obligations. They should be regarded ideally as a team of persons of relatively equal status not dominated by any one of their number. The members of such a board cannot themselves assume any administrative or executive duties and it is therefore necessary to appoint an executive director or manager to be solely responsible for the conduct of the authority's business. Subject to the approval of the board the executive director should appoint his own staff and define their duties. Apart from the setting of policies and the approval of their execution neither the board as a whole nor its individual members should become involved in the administration and routine of the housing authority's business.

In addition to the technical personnel required for the design and construction phases of a housing project the commission will require a management staff to select tenants, maintain relationships with them, and collect rents. In view of the special nature of a project intended for the occupation of low-income families these duties demand the services of a particularly well-trained and competent type of personnel. In the effort to obtain economies in operation and maintenance costs and in order to achieve the social benefits which are the objectives of a low-rental housing project, the appointment of suitable management personnel will undoubtedly be a vital factor in the success of a housing commission's undertakings. The importance of this phase of the housing authority's activities suggests that the executive director himself must be a person whose experience has not been solely in the field of construction and administration but who has a wide appreciation of the social problems which low-rental housing should be designed to solve.

RENTAL HOUSING AND LOCAL GOVERNMENT

The carrying out of a rental-housing programme appears to involve three different kinds of administrative operation. There is, first of all, the process of community planning by which decisions must be made for the location of housing in any urban area and for its detailed arrangement on the ground. Then there

is the whole process of acquiring capital and the particularly difficult operation of determining who should contribute to the subsidy funds and in what proportion. Thirdly, there is the actual management of housing projects and the responsibility for tenant selection and rent collection. The more carefully these three administrative operations are considered, the more interrelated do they appear to be. They cannot each be considered in isolation.

As we approach the task of devising simple administrative arrangements for rental housing we find that peculiar difficulties immediately arise because the urban areas in which this housing must be placed are not each governed by a single municipal body. Each urban area is composed of a group of municipalities, typically a central city and its surrounding suburban townships. The problems of rental housing inevitably raise the problems of metropolitan organization and the administrative relationships of the municipalities within each such region. A satisfactory system of housing administration must be devised for a kind of community which is a single unit in its economic, social, and cultural nature but which is partitioned into several administrative districts.

As we enter this period of national expansion we find that the original framework of urban administration has been outgrown. The communities of city-dwellers have overflowed the boundaries of the incorporated municipalities originally established for their convenience and service. In many cases new municipalities have been incorporated to embrace some of the population beyond a city's boundaries. But a great part of this overflow of population is living in suburban municipalities where people in urban occupations have been superimposed on the population of an area previously administered by and for its rural inhabitants. It is a characteristic of an urban society that more elaborate and costly public services are required to overcome the mechanical difficulties of putting more people in less space; they must share the operation and costs of many services which are privately performed in a rural area, and they must protect themselves against the conflicts and contagions which arise whenever people live in

close proximity. Also the occupations of urban workers require more trained skills and therefore a more elaborate educational system; and this in turn leads to the demand for a more artificial and expensive way of living. Difficulties must inevitably arise when the costs of maintaining this urban way of life are thrust upon the outlying non-urban taxpayers of townships in the process of urbanization. The Toronto region is experiencing this difficulty for the metropolitan area now spreads over a city, four towns, three villages, and five townships in various phases of urbanization. Difficulties of a similar nature exist in those smaller urban areas where only three or four municipalities are involved.

The internal conflicts within such areas take many forms and arise out of the distinctive pattern of each region. The accidents of topography, the location of railways and highways, and the economic fortunes of business enterprises have caused communities to develop in a manner and in directions which could not have been foreseen when the municipal boundaries were first laid down. Pressures and conflicts have inevitably arisen because no single municipality within an urban area has found itself equipped with a balanced proportion of residential, industrial, and other land uses. There is no such thing as a perfectly planned administrative area containing all the features required by its population for living and working. There has been a balanced unity in the metropolitan area as a whole, but no one of the component municipalities has been complete within itself. And so, in the keen competition for revenue and with a spirit of sturdy independence, each component municipality has sought to round out its share of profitable land uses; each has sought to attract those building enterprises whose high assessment would increase the tax revenue and has resisted any kind of development which would cost more to service than it yielded in taxes. Specifically it has been the ambition of municipal councils to obtain new industries and large houses and to exclude low-cost and low-rental housing. Since municipal councillors usually consider that they have been elected in order to protect the local tax-rate, this is not an unreasonable attitude. It is not, however, an attitude which

leads to an easy resolution of the problems with which we are concerned. For if there are to be industries there must also be housing for the employees; and this must include a reasonable proportion of low-rental housing unless industries are prepared to pay a scale of wages greatly in excess of what is now contemplated. Also, if there are to be people of prosperity owning houses of high assessed value, there must also be people of moderate and low income to operate the factories and businesses on which that prosperity is based. The economy and the society of the metropolitan area must be viewed as one whole. Amongst other social requirements a metropolitan community must have open spaces and must have low-rental housing; the costs of these should be assessed against all who benefit from the economic operations of the metropolis as a whole. It may, in fact, be said that the effort of any municipality to exclude its proportionate share of those community features which cost money rather than create revenue is a resistance to the basic doctrine of democracy—that taxation should be based on the ability to pay.

To overcome these conflicts two obvious courses of action suggest themselves. One is to re-define the limits of urban development and to merge all the municipalities within the area into one large municipal corporation. This is not a realistic proposal for it is generally believed that there is a real value in retaining the sturdy local independence that has grown up in each component municipality; nevertheless mergers should certainly be encouraged whenever the municipalities are mutually willing. The other course of action which has been successfully carried out in very large metropolitan areas is the establishment of the "borough" system; by this means the metropolitan municipalities enter into a kind of federal union, merging certain of their administrative and financial operations but retaining their corporate independence and the responsibility for certain local affairs. The classic examples of such a system are New York and London, England. Since 1898 the city of New York has consisted of five boroughs (Manhattan, Brooklyn, Queens, the Bronx, and Richmond); the presidents of the boroughs, together with the mayor,

the city controller and the president of the city council sit as a metropolitan board having a large number of administrative and coordinating functions and managing the city's sinking funds. London, on the other hand, contains twenty-eight boroughs and is administered by the London County Council which is directly responsible for certain administrative functions such as public welfare, education, and town-planning, and which is empowered to make by-laws which are administered by the borough councils. It is to be observed that both in New York and London housing administration is conducted by the metropolitan authority. (The London County Council has erected about 92,000 units of public housing and the New York City Housing Authority about 19,000 units.) A number of large American cities have been able to consolidate their metropolitan organization through the development of the county as the administrative area (Los Angeles, San Francisco, Philadelphia, Baltimore, and St. Louis). In Canada the only example of a coordinated metropolitan government is Montreal. Here the Montreal Metropolitan Commission assumes certain administrative functions for the city and its fourteen neighbouring municipalities. The costs of its operations are borne by all these municipalities jointly, the share of each being proportioned to the total assessed value of property from which local revenue is derived. (In 1946-47 the city's share was 79.8 per cent of the whole.)

The solution to our present housing problems cannot wait upon the reconstituting of our metropolitan governments. It is necessary to devise methods of administration based on a rationalization of the present circumstances. A good deal of progress towards such rationalization is now being made through the processes of town planning or community planning. In many urban areas planning boards are now setting out the limits of urban development by zoning regulations and by the control of subdivisions; this may be regarded as an important step towards the re-definition of the areas of urban government. However, the special contribution of a planning board and its technical staff is the objective detachment with which it appraises the conditions and needs of the community. A planning board working in a

metropolitan area inevitably looks at the economy of the area as a whole because employment, business operations, and traffic are not confined by municipal boundaries. Though a planning board must be aware of these boundaries that cut across the land, yet the attempt to plan the uses of the land in the most economic and appropriate way will show their comparative irrelevance. In devising a rational plan for the distribution of industrial, residential, and recreational land a planning board cannot assume that each suburban municipality is to be regarded as an economic and social organization complete within itself. It might be evident for instance that the amenities of the whole metropolitan community would be greatly enhanced if no further urban development were permitted in one particular suburban township. Or it might appear advisable to define an industrial area in one municipality and in a neighbouring township establish sites for low-rental housing to be occupied by the employees of such industries.

It is not necessary to pursue this theme further in order to show that the locating of a low-rental housing project in any municipality should not be regarded as a justification for imposing upon that particular group of taxpayers the costs that may be involved in such an enterprise. If the industries and businesses in the metropolitan area require the services of workers at moderate and low incomes, then their families must be housed somewhere nearby, and any local costs involved should be assessed against the metropolitan area as a whole. Because the economy of the urban region is based upon certain industries and services which must pay wages that are not commensurate with the costs of private-enterprise housing, there is clearly no justification for imposing a tax upon a particular group of citizens who happen to live in the municipality where low-income families can most conveniently be housed. In this the central city and the suburban municipalities have mutual obligations. Any costs or deficits of low-rental housing that must be carried by municipal taxpayers should be borne jointly by all the municipalities in the metropolitan area, and the share of each should be in proportion to its revenue-raising capacity.

This of course raises the question as to whether municipal taxpayers should be expected to make any contribution at all towards the costs of low-rental housing. It has been pointed out above that any additional taxes on property must have the effect of raising the cost of housing and so contradict the very purpose of measures for reducing housing costs. Therefore, should higher levels of government, provincial or federal, provide all the subsidy funds required and make good all the deficits arising from inadequate local tax revenue?

In attempting to answer this question we must observe what is generally regarded to be a sound principle of public and private business—that only those who contribute the funds for an undertaking can claim authority over their expenditure. There cannot be taxation without representation or representation without taxation. If a community is to retain the freedom to plan its own development and administer the housing of its citizens, it cannot at the same time place the whole financial responsibility upon a higher level of government. While the federal government will undoubtedly be expected to provide the major part of the subsidy funds required for low-rental housing, yet there must be some measure of financial participation by the local community if it is to preserve its constitutional rights in the administration of its own affairs. The privileges of local government go hand in hand with its obligations.

There can be little doubt that the management of housing should be a responsibility of local government rather than a function of the federal or provincial governments or their agencies. In the long and honourable traditions of British local government the fabric of a town—its buildings, services, and amenities—have been the particular concern of the local citizens who incorporate themselves to conduct this business through their own elected representatives. Though these traditions were formed at a time when houses were exclusively private property and the conception of public or corporately-owned housing had not appeared on the scene, yet it is a serious departure from sound constitutional traditions for a senior government to own resi-

dential property and so interpose its authority and judgment between the householder and his locally elected representatives. The political implications of such a relationship are distinctly disturbing. It is for this reason that in Chapter v above we have emphasized the role of the local housing authority. But, in view of the need which we have now revealed for housing to be administered on a metropolitan basis, it is necessary to enlarge the functions of the housing authority so that it may locate, own, and manage projects in any of the municipalities in an urban area. The metropolitan housing authority should be a creature of the whole group of municipalities, deriving its authority, and some part of its operating funds from them jointly.

We have attempted to examine briefly the administrative problems arising out of the need for rental housing. It is not our intention here to discuss in detail the exact procedures by which these problems may be solved, but only to suggest the basic principles which seem to be involved. Local situations and the customs and legislation of each province will require variations of practice. A similarity rather than a uniformity of procedure is desirable. In conclusion the basic principles may be stated thus:

(1) In any urban area rental housing should be placed on the sites which are most suitable in relation to the economy and amenities of the area as a whole, and disregarding municipal boundaries.

(2) Any housing project in which rents are set below the economic level by means of funds raised by public taxation should be owned and managed by a local public authority.

(3) A minor proportion of the funds required to achieve such lowered rentals should be contributed by the taxpayers in the urban area which benefits from such housing.

(4) Each municipality in such an urban area should contribute funds in proportion to the total assessed value of the property from which each obtains its revenue.

Chapter Six: THE ULTIMATE HOUSING PROBLEM

WHEN World War II came to an end, the pinch of Canada's housing shortage was felt keenly by people in all kinds of economic circumstances. This experience was not confined to households at any one economic level. Generals, corporals, executives, clerks, professional people, industrial workers—all found themselves caught in the same kind of situation. In the general re-shuffle that has taken place during the subsequent months and years, those in better economic circumstances have been the first to benefit. Many who could afford to do so have bought old houses at inflated prices. And as the supply of new houses has come in, it has been a relatively privileged section of the community that has in this way been released from the squeeze; for the purchase of a \$7,000 house is beyond the capacity of the average Canadian wage-earner.

As the housing market closes in on the margin of its economic potentialities it is to be expected that the remaining impact of the shortage will be confined more and more to those in the least favourable economic circumstances. As upper-income families move into new houses there will be a releasing of the pressure from the top downwards. Those at the lower end of the scale will inevitably be the last to benefit and, if the shortage cannot in fact be overcome, it will be the low-income families who will be the ultimate victims. They will have no alternative but to remain overcrowded in the worst housing or, when no permanent accommodation is available, they must become the tenants of temporary housing. Already there are thousands of Canadian families in emergency housing without any apparent prospect of moving

elsewhere. (By the end of 1947 there were in Toronto alone nearly 5,000 families in emergency housing provided by the city.) Under these circumstances the most obsolete housing in Canadian cities has to be retained in use and continues to command a rental value.

The severity of the housing shortage must be measured in terms of human distress. Children and adults crowded into small quarters cannot escape from the frictions and frustrations occasioned by too close and too constant proximity. The humiliations, squalor, ugliness and functional inadequacy of obsolete and temporary housing leave their permanent mark upon the occupants. It is for this reason that the ultimate territory on which a community must face its problems of housing shortage is in the slums and blighted areas. The inevitable cycle of housing history brings us back to this.

Before the war, what was customarily referred to as "the housing problem" was that unwholesome condition in which a large number of low-income families had to live; this was a problem conveniently remote from the interests and experience of most people in a Canadian city. Since the war we have come to speak of the shortage as "the housing problem"; it was at first regarded as a temporarily embarrassing situation which would cease to exist when peace-time production got under way. These two "housing problems" have commonly been regarded as of quite a different nature, one being a matter solely within the province of health and welfare systems and the other being simply a problem of production. The fact is, of course, that the two problems are one and the same. Slum conditions are simply the ultimate form of a housing shortage. To state that there are slums, blighted areas, and emergency housing is simply another way of saying that there is a shortage of houses of adequate standard.

A shortage of housing is not a new phenomenon. In Canadian cities the situation has been in the process of development for a long time, particularly since 1930 when the incoming supply of new housing began to lag seriously. The rapid growth of the

urban wage-earner population, during and since the recent war, has finally brought matters to a head because the great mass of this population cannot afford to buy the new housing that it needs. So far Canadian communities have met this situation in an entirely negative manner; some of their citizens have been expected to lower their standard of living and lower their standard of housing. The poorest families have had to occupy undesirable housing and pay the rent that it has commanded even though this has been greatly in excess of their real capacity. It has been shown that low-income families have habitually had to pay a larger proportion of their incomes for housing accommodation than has been paid by families in easier circumstances. Even if low-income families had paid the same proportion, many of them would still have been unable to maintain a standard of living which has received general recognition by the community of which they are members.

The ultimate objective of the national housing programme should be the provision of a decent dwelling for every Canadian family. From this it follows that the crucial and ultimate test of the effectiveness of housing policy is the condition of the worst housed families in our communities. The task will not be completed until obsolete housing has been removed and every Canadian family has been given the opportunity to enjoy healthy and satisfying living conditions. It is a task which undoubtedly requires all the technical ingenuity and administrative skill which the Canadian people possess.

Obviously the most convenient and economical way of providing the community with an adequate supply of decent accommodation is through the economic market for new housing. If those who can afford to own or to rent new housing could maintain such a volume of production that every family could be well-housed and obsolete housing could be successively removed, then in the process of time there would be no housing problem. All the resources of science and industry must be applied to the removal of the obstructions at the point where, in a free economy, the bulk of the housing supply should be concentrated—at the mid-

point in the income scale. Unless a balance in the ratio between incomes and housing costs can be established, the shortage will continue to stack up against families in the lower-income ranges. Unhappily, any study of the economic factors involved seems to lead inevitably to the conclusion that a balance of incomes and housing costs is most unlikely to be established at a level which would produce an adequate supply of housing. This has certainly been the experience of all other industrialized nations and there are no factors peculiar to our economy which indicate that Canada is likely to be an exception to this experience. In fact, the requirements of shelter in our stern climate are likely to make the economics of housing in Canada specially intractable.

If this conclusion is well founded it will be necessary to devise a means whereby a larger proportion of the national income may be directed into the production of housing. It will be necessary to supplement the supply of housing created by the private market. Under the social and economic conditions characteristic of a society such as ours, the recourse to public housing and the operations of rental subsidies seems to be an expedient which cannot be avoided if the national housing programme is to be maintained. By the very force of circumstances Canada is already, in fact, embarked upon such a course; the projects of Wartime Housing Limited and the emergency housing operated by municipalities are all both publicly owned and subsidized. (The city of Toronto, alone so far amongst Canadian municipalities, has undertaken to build rental housing through its own public housing authority because there is no other way in which such rental housing can be produced.)

Before the post-war housing programme is much further advanced it seems inescapable that there will be much public discussion as to the future extent and permanency of public housing in Canada. In discussions of this subject it is found that some are born "public housers" and their views on the matter are blurred by an emotional aura, while some have public housing thrust upon them reluctantly and refuse to accept it as more than an emergency measure. Too few are able to achieve a rational view

of this evidently essential element in a national housing programme. The problem is, of course, of a political nature since it involves the relative responsibilities and functions of government—federal, provincial, and municipal. The choice of methods and the exact allocation of responsibilities will, quite properly, arouse differences of political opinion, for such is the process by which decisions are made in a democracy. Differences of opinion are to be appreciated rather than repressed. But differences of approach toward the subject of low-rental housing should not be allowed to obscure the central and non-political fact that the provision of this type of accommodation is the ultimate housing problem. This is no longer a matter of controversy. Nor is there much value in debating the fact that, to date, there is no known method of providing low-rental housing except through public agencies supported by some kind of contribution from public revenue.

No amount of statistical research and no authoritative dogmatic pronouncements can specify the extent to which public housing should be taken, because no one can foresee the extent to which the private market will succeed in fulfilling any community's needs. The potentialities of the economic market and the resources of the private builder must be extended to their limits both in providing additional housing in suburban areas and in effecting replacements in the interiors of cities.

It must be admitted that there are not at present very hopeful prospects of extending the economic market through a reduction in housing costs. Unless the Canadian people are prepared to make a revolutionary attack upon wage-rates and upon interest-rates the only direction in which it is possible to seek significant economies is in the building-process itself. Though prefabrication still gleams like a bright star on the horizon, it is only realistic to confess that it is still very far away. Much of the genius of American industrialists and much public capital has been made available to prefabrication enterprises in the United States since the war, but in 1947 only 5 per cent of new dwellings in the United States came from this source and prices proved to be no lower

than those achieved by old-fashioned methods. This sceptical interpretation of the facts before us does not make it any less necessary to pursue with energy the innumerable minor features of economy by which the housing market can be broadened. But it would be foolish to imagine that the combined effect of all the known economies in production would be sufficient to invalidate the main conclusion at which we have arrived, namely that the economic market cannot by itself fulfil the housing needs of the Canadian people.

If it does not prove possible to extend the housing market very significantly by bringing the price of new housing within the capacity of more Canadian families, there still remains one aspect of the market to which little attention has been given. It will become increasingly important to improve the *quality* of new housing in order to attract a larger proportion of those who can well afford to own or rent a new dwelling unit. So far it has been the purpose of housing legislation and the aim of lending institutions to concentrate on the lower fringe, as it were, of the housing market. The product of post-war residential construction has consequently been of a uniformly drab and uninspired character, hewing closely to the line of minimum standards and creating in the suburban areas an environment most unattractive to higher-income families. Many who could afford to live in new accommodation have preferred to pay \$15,000 or \$20,000 for a used house more than twenty years old. Little has been done to create well-planned estates containing small, efficient houses of sophisticated design, grouped in a pleasant landscape setting, and selling at prices from \$8,000 to \$15,000; housing of this character would attract economically stable families who are at present not at all interested in the crude products of the speculative builder. In other words, even if building costs cannot be revolutionized it is still possible that greatly improved architectural design and neighbourhood planning would uncover a market that has not yet been exploited. It would, moreover, be sound public policy to develop this part of the market, rather than to push to dangerous limits that fringe of the housing market which is based on families

having less economic security, many of whom are now assuming amortisation payments beyond their real capacity. Is it possible that a renaissance of domestic architecture and community planning may yet prove to be one of the most important factors in solving our housing problems and in reducing the proportions of the programme that must be carried out by public housing agencies? A vigorous stimulation of popular interest in modern architecture and planning might release emotional forces which would generate a new momentum of effective housing demand.

In this connection it may be said that an opportunity to develop model housing estates is now offered by the new legislation entitling insurance companies to finance land improvements in suburban areas; with the co-operation of local planning boards there is, for the first time, an opportunity to plan whole neighbourhood units, control their architectural and landscape design, and bring them to completion in an orderly and logical fashion. Though the strengthening of the housing market by such means will not eliminate the need for some form of publicly-owned rental housing, yet its influence in maintaining a steady volume of supply will certainly moderate the pressure now being brought on middle-income and low-income families.

This study of housing problems has been conceived and expressed largely in economic terms. In the last analysis, however, we may well come to the conclusion that the successful accomplishment of a national housing programme will ultimately depend not upon economic considerations but upon the philosophy and temperament of the Canadian people. The economic market for housing is likely to lag from sheer inertia and boredom unless the carrying out of the programme is generally regarded as a great creative national enterprise, exciting all the imaginative, aesthetic, and emotional faculties of the people. There must be a dramatic satisfaction in the building of new communities rather than a sense of futility in the scattering of bungalows upon the reluctant suburbs.

It has been argued here that the amount of obsolete housing which has been allowed to accumulate within our cities and the

mounting numbers of families housed in emergency accommodation together represent a backlog of residential construction which cannot now be cleared by the supply which will come in from the private housing market. If this is true, then it becomes clear also that ultimately the solution to this central problem of housing involves the forming of a philosophy concerning the rights and equities within our society. For if it is not considered important that every adult and every child in a Canadian community should be able to enjoy a certain way of life, then there is no housing problem.

Appendix: TABLES I to XXVI

TABLE I

RELATIONS BETWEEN HEALTH AND HOUSING CONDITIONS, TORONTO, 1934

Incidence of Tuberculosis

In Good Housing areas the incidence was 25 per 10,000 population
Poor 37
Worst 64

Infant Mortality Rate

In Good Housing areas the rate was 58.3 per 1,000 living births
Poor 72.6
Worst 121.2

Juvenile Delinquency Rate

In Good Housing areas the rate was 7.9 cases per 10,000 population
Poor 27.6
Worst 36.6

Source: *Report of the Lieutenant Governor's Committee on Housing in Toronto* (Toronto, 1934).

TABLE II

RECORDED CHANGES IN HEALTH OF POPULATION MOVED FROM SLUM
CONDITIONS TO MODERN HOUSING

	<i>In Slum Area</i>	<i>In Modern Housing</i>	<i>In Whole City</i>
* <i>Liverpool, England 1918-1920</i>			
Death-rate per 1,000	37.0	26.6	18.0
Deaths from T.B.	4.0	1.9	1.7
Infant mortality rate	259	162	119
* <i>Liverpool, England 1923-1924</i>			
Death-rate per 1,000	28.4	18.2	13.9
Deaths from T.B. per 10,000	299	164	123
Infant mortality rate	177	131	98
** <i>Newark, N.J. 1942-1943</i>			
T.B. per 10,000 ages 15-40	58.8	29.2	
Infant mortality rate	41.5	34.7	
Communicable diseases, under 15	158.1	114.2	
** <i>Philadelphia, Penn. 1943</i>			
T.B. death-rate per 1,000	5.98	.33	
Pneumonia death-rate per 1,000	5.86	.33	

Source:

**Handbook For Research in the Social Aspects of Housing* (Washington, United States Housing Authority, November 1941).

***The Cost of Slums in Newark* (City of Newark Housing Authority, 1946).

TABLE III

 INCREASES OF POPULATION AND HOUSING 1931-1945 TORONTO
 METROPOLITAN AREA

	(A) Increase in Population 1931-1945	(B) Increase in Housing Units 1931-1945	Ratio of (A) to (B) Number of Persons Per Unit
Toronto, city	60,278	8,052	7.4
Forest Hill, vill.	9,421	2,405	3.91
Leaside, tn.	9,234	2,866	3.22
Long Branch, vill.	1,683	410	4.10
Mimico, tn.	2,957	654	4.52
New Toronto, tn.	3,863	(600)	*6.43
Swansea, vill.	2,749	694	3.96
Weston, tn.	1,731	504	3.43
Scarborough, twp.	7,270	2,132	3.31
York, twp.	22,546	4,602	4.89
East York, twp.	14,217	3,778	3.76
North York, twp.	15,446	4,926	3.13
Etobicoke, twp.	12,203	3,562	3.56
<i>Totals</i>			
Suburban Municipalities	103,320	27,815	3.71
Metropolitan Area	163,598	35,867	4.56

Source: Humphrey Carver, *How Much Housing Does Greater Toronto Need?* (Toronto, 1946).

*Records for residential construction in New Toronto are only available from 1937, and it is not therefore possible to present valid figures for this ratio. There are reasons for believing that this approximation is not far from the truth.

TABLE IV

SUB-STANDARD DWELLINGS IN CANADIAN CITIES AS RECORDED BY THE 1941
CENSUS.

Dwellings in Need of External Repair and/or Lacking or With Shared Use
of Flush Toilets and Bathing Facilities.

	Number of Dwellings	Percentage of All Dwellings in the City
Toronto	42,226	29
Montreal	54,375	27
Vancouver	19,571	27
Winnipeg	17,821	36
Quebec	12,230	45
Hamilton	11,275	28
Edmonton	10,787	46
Calgary	8,300	38
Ottawa	8,176	25
Windsor	7,887	31
London	6,811	33
Regina	6,618	43
Halifax	5,836	43
Saint John	5,575	46

Source: Advisory Committee on Reconstruction, Report IV, *Housing and Community Planning* (Ottawa, March 1944), and Dominion Bureau of Statistics 1941 Census.

TABLE VI

PROGRESS OF HOUSING PROGRAMME, TORONTO METROPOLITAN AREA,
1931-1947

	Value of Residential Contracts Awarded (1)	City	Number of New Units (2)	
			Suburbs	Metropolitan Area
1931	\$10,846,900	1,639	1,746	3,385
1932	11,963,800	192	786	978
1933	13,036,700	220	601	821
1934	14,049,900	295	798	1,093
1935	13,210,500	570	1,011	1,581
1936	15,435,000	369	1,565	1,934
1937	14,930,600	618	1,442	2,060
1938	15,476,400	627	1,384	1,911
1939	20,865,400	458	2,518	2,976
1940	26,011,300	524	2,781	3,305
1941	25,105,100	495	3,264	3,620
1942	25,107,300	633	2,201	2,696
1943	25,107,300	476	1,823	2,456
1944	25,107,300	879	2,396	2,872
1945	25,107,300	417	2,654	3,533 (3)
1946	25,107,300	568	4,030	4,447
1947	25,107,300	568	3,689	4,021

Sources:

- (1) "Value of residential contracts awarded" from *MacLean Building Reporter*.
- (2) "Number of new units" 1931-44 from records of the municipalities in the area. See Carver, *How Much Housing Does Greater Toronto Need?*
- (3) "Number of new units" 1945, 1946, and 1947 from *Housing Statistics* published by the Dominion Bureau of Statistics.

TABLE VI

COSTS OF BUILDING MATERIALS AND OF LIVING IN CANADA			
		Cost of Building Materials (1935-1939=100)	Cost of Living (1935-1939=100)
1945	First Quarter	145.3	118.6
	Second	144.6	119.1
	Third	144.4	120.3
	Fourth	144.6	119.9
1946	First Quarter	145.8	120.0
	Second	152.6	122.1
	Third	152.9	125.4
	Fourth	158.7	127.0
1947	First Quarter	171.1	127.9
	Second	180.7	132.9
	Third	191.1	137.3
	Fourth	(210.9)	143.9

Source: *Housing in Canada*, II(4), Oct., 1947.

TABLE VII

	Residential Construction	Total (All Forms of Construction)	Residential as Percentage of Total
	\$	\$	%
1934	10,846,900	20,150,700	53
1935	11,963,800	22,618,500	53
1936	13,036,700	21,358,200	60
1937	14,049,900	22,112,000	56
1938	13,210,500	24,485,900	57
1939	15,435,000	24,485,900	63
1940	14,930,600	29,403,100	51
1941	15,476,400	32,142,900	47
1942	13,819,800	24,036,100	57
1943	14,718,400	24,066,800	61
1944	20,865,400	36,580,700	57
1945	26,011,300	50,169,500	52
1946	25,105,100	75,974,700	33
1947	21,071,300	75,506,000	28

Source: *MacLean Building Reporter*.

TABLE VIII

TYPES OF RESIDENTIAL ACCOMMODATION BUILT IN THE TORONTO
METROPOLITAN AREA DURING 1945, 1946, AND 1947

Type of Accommodation	1945	1946	1947	Total	Per cent
Single dwelling	2,727	3,869	3,242	9,838	
Semi-detached or double	354	130	296	780	89
Row or terrace	8	5	6	19	
Duplex	6	28	16	50	
Triplex	—	3	3	6	
Apartment or flat	49	13	98	160	5
Apartment with business premises	14	156	175	345	
Conversions and reconversions	300	243	182	725	6
<i>Total</i>	<i>3,458</i>	<i>4,447</i>	<i>4,018</i>	<i>11,923</i>	<i>100</i>

Source: *Housing Statistics 1945, 1946, 1947* (Ottawa: Dominion Bureau of Statistics).

TABLE IX

TYPE OF CONSTRUCTION USED ALL HOUSING COMPLETED IN TORONTO
METROPOLITAN AREA 1945 AND 1946

Type of Housing by Materials Used	Percentage of All Housing Constructed	
SINGLE FAMILY HOUSES		
(a) Wood frame with wood siding or shingles	25.5	
(b) Wood frame and brick veneer	2.0	
(c) Cinder or cement blocks and stucco	2.1	
(d) Brick facing and masonry blocks	22.6	
(e) Solid brick	30.4	82.6
MULTIPLE UNIT HOUSES		
(a) Wood frame with siding or shingles	1.7	
(b) Brick facing and masonry blocks	2.4	
(c) Solid brick	4.3	8.4
CONVERSIONS		
OTHER		2.4
		100.0

Source: *Housing Statistics 1945, 1946.*

TABLE X

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF
ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE
WITH WOOD FRAME AND WOOD SIDING, TORONTO, 1947

Kind of Building Materials Used	Type of Unit of Material	Cost Per Unit of Material	Number of Units	Value
		\$		\$
I. Cement, Gravel, and Sand				
1. Cement	Bags (4)	3.15	250	196.88
2. Aggregates for concrete	Cu. yds.	3.90	56	218.40
3. Concrete blocks	Number			
	<i>Sub-total</i>			415.28
II. Bricks, Tile, and Stone				
1. Bricks for chimneys	No.	27.00 M	1,000	27.00
2. Brick for exterior walls	No.			
3. Field tile sub-drainage	Ft.	.24	180	43.20
4. Vitrified flue linings	Ft.	.36	50	18.00
				88.20
III. Lumber and Its Products				
1. Structural (dimension) lumber	B.M. ft.	69.00 M	6,400	441.60
2. Yard lumber, rough and surfaced	B.M. ft.	73.00 M	6,000	438.00
3. Wood clapboard for exterior walls	Sq. ft.	88.50 M	1,800	150.30
4. Exterior millwork: doors, windows, porch frames, cornices	B.M. ft.	206.00 M	1,200	247.20
5. Floorings: hardwood	B.M. ft.	137.00 M	750	102.75
6. Floorings: softwood	B.M. ft.	94.00 M	750	70.50
7. Interior millwork: doors, doors and window trim, baseboards	B.M. ft.	287.00 M	920	218.04
8. Interior millwork: kitchen cupboards	B.M. ft.		80	123.60
9. Strapping	L. ft.			
	<i>Sub-total</i>			1,791.99

TABLE X (CONT'D)

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF
ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE
WITH WOOD FRAME AND WOOD SIDING, TORONTO, 1947

<i>Kind of Building Materials Used</i>	<i>Type of Unit of Material</i>	<i>Cost Per Unit of Material</i>	<i>Number of Units</i>	<i>Value</i>
		\$		\$
IV. Lath, Plaster, and Insulation Materials				
1. Rock wool	Sq. ft.	6.35 C	2,100	133.35
2. Interior plaster, on gypsum, fibre board, or wood lath	Sq. yds.	.66	400	264.00
3. Building paper, inside	Rolls	2.82	7	19.74
4. Building paper, outside	Rolls	2.47	8	19.76
5. Exterior plaster— stucco	Sq. yds.			
<i>Sub-total</i>				436.85
V. Roofing Materials				
1. Shingles	Squares	7.30	15	109.50
2. Dry felt, 20 yr. proof	Rolls			
3. Tar felt	Rolls			
4. Pitch	Lbs.			
5. Gravel	Tons			
<i>Sub-total</i>				109.50
VI. Paint and Glass				132.00
VII. Plumbing Equipment and Fixtures				300.00
VIII. Heating Equipment and Fixtures				250.00
IX. Electrical Equipment and Fixtures				139.00
X. Other Materials				194.00
Total				3,856.82

Source: Based on materials' specifications in *Manpower and Material Requirements for a Housing Program in Canada*.

TABLE XI

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF
ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE
TYPE WITH SOLID BRICK, TORONTO, 1947

<i>Kind of Building Materials Used</i>	<i>Type of Unit of Material</i>	<i>Cost Per Unit of Material \$</i>	<i>Number of Units</i>	<i>Value \$</i>
I. Cement, Gravel, and Sand				
1. Cement	Bags (4)	8.15	250	196.88
2. Aggregate for concrete	Cu. yds.	8.90	56	218.40
3. Concrete blocks	Number			
<i>Sub-total</i>				415.28
II. Bricks, Tile, and Stone				
1. Bricks for chimneys	No.	27.00 M	1,000	27.00
2. Bricks for exterior walls	No.	88.00 M	22,000	726.00
3. Field tile sub-drainage	Ft.	.24	180	43.20
4. Vitrified flue linings	Ft.	.36	50	18.00
<i>Sub-total</i>				814.20
III. Lumber and Its Products				
1. Structural (dimension) lumber	B.M. ft.	72.00 M	5,000	360.00
2. Yard lumber, rough and surfaced	B.M. ft.	78.00 M	4,300	313.90
3. Wood clapboard for exterior walls	Sq. ft.			
4. Exterior millwork: doors, windows, porch frames, cornices	B.M. ft.	206.00 M	1,700	350.20
5. Floorings: hardwood	B.M. ft.	137.00 M	750	102.75
6. Floorings: softwood	B.M. ft.	94.00 M	750	70.50
7. Interior millwork: doors, doors and window trim, baseboards	B.M. ft.	237.00 M	920	218.04
8. Interior millwork: kitchen cupboards	B.M. ft.		80	123.60
9. Strapping	L. ft.	1.10 C	400	4.40
<i>Sub-total</i>				1,543.39

TABLE XI (CONT'D)

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF
ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE
TYPE WITH SOLID BRICK, TORONTO, 1947

<i>Kind of Building Materials Used</i>	<i>Type of Unit of Material</i>	<i>Cost Per Unit of Material</i>	<i>Number of Units</i>	<i>Value</i>
		\$		\$
<i>IV. Lath, Plaster, and Insulation Materials</i>				
1. Rock wool	Sq. ft.	6.85 C	650	41.28
2. Interior plaster, on gypsum, fibre board, or wood lath	Sq. yds.	.66	400	264.00
3. Building paper, inside	Rolls			
4. Building paper, outside	Rolls			
5. Exterior plaster—stucco	Sq. yds.			
<i>Sub-total</i>				<u>305.28</u>
<i>V. Roofing Materials</i>				
1. Shingles	Squares	7.30	15	109.50
2. Dry felt, 20 yr. proof	Rolls			
3. Tar felt	Rolls			
4. Pitch	Lbs.			
5. Gravel	Tons			
<i>Sub-total</i>				<u>109.50</u>
<i>VI. Paint and Glass</i>				
				<u>107.00</u>
<i>VII. Plumbing Equipment and Fixtures</i>				
				<u>300.00</u>
<i>VIII. Heating Equipment and Fixtures</i>				
				<u>250.00</u>
<i>IX. Electrical Equipment and Fixtures</i>				
				<u>154.50</u>
<i>X. Other Materials</i>				
				<u>216.50</u>
<i>Total</i>				<u>4,215.65</u>

Source: Based on materials' specifications in *Manpower and Material Requirements for a Housing Program in Canada*.

TABLE XII(A)

COMPONENT COSTS OF CONSTRUCTING DWELLINGS*

Types of Dwelling Unit: SINGLE FAMILY HOUSE

- (a) Wood frame with siding
- (b) Wood frame with brick veneer
- (c) Masonry blocks and stucco
- (d) Masonry blocks with brick facing
- (e) Solid brick

MULTIPLE UNIT DWELLING

- (f) Wood frame with siding
- (g) Masonry blocks with brick facing
- (h) Solid brick

Dwelling Type	Cost of Materials	Cost of Labour	Cost of Overhead	Total
	50%	35%	15%	100%
(a)	\$3,856	\$2,699	\$1,157	\$7,713
(b)	4,049	2,834	1,214	8,098
(c)	3,821	2,675	1,146	7,643
(d)	4,175	2,922	1,252	8,350
(e)	4,215	2,950	1,264	8,431
(f)	2,880	2,016	864	5,760
(g)	2,872	2,011	861	5,745
(h)	2,903	2,032	871	5,807

Source: Based on materials' specifications in *Manpower and Material Requirements for a Housing Program in Canada*.

*Based on costs of materials in Toronto, January, 1947 and assuming materials, labour, and overhead to be in the proportions of 50, 35, and 15 per cent respectively.

TABLE XII(B)

COMPONENT COSTS OF CONSTRUCTING DWELLINGS*

Types of Dwelling Unit: SINGLE FAMILY HOUSE

- (a) Wood frame with siding
- (b) Wood frame with brick veneer
- (c) Masonry blocks and stucco
- (d) Masonry blocks with brick facing
- (e) Solid brick

MULTIPLE UNIT DWELLING

- (f) Wood frame with siding
- (g) Masonry blocks with brick facing
- (h) Solid brick

Dwelling Type	Cost of Materials	Cost of Labour	Cost of Overhead	Total
	52.5%	27.5%	10%	100%
(a)	\$3,856	\$2,754	\$734	\$7,344
(b)	4,049	2,892	771	7,712
(c)	3,821	2,729	728	7,278
(d)	4,175	2,982	795	7,952
(e)	4,215	3,051	802	8,028
(f)	2,880	2,057	548	5,485
(g)	2,872	2,053	547	5,472
(h)	2,903	2,074	552	5,529

Source: Based on materials' specifications in *Manpower and Material Requirements for a Housing Program in Canada*.

*Based on costs of materials in Toronto, January, 1947, and assuming materials, labour, and overhead to be in the proportions of 52.5, 27.5, and 10 per cent respectively.

TABLE XIII

DISTRIBUTION OF INCOMES OF FAMILIES IN THE TORONTO METROPOLITAN AREA, 1941		
Annual Income \$	Estimated Number of Families	Percentage of All Families
6,000 and over	4,080	2.0
5,000-6,000	2,856	1.4
4,000-5,000	6,528	3.2
3,000-4,000	18,360	9.0
2,500-3,000	17,544	8.6
2,000-2,500	31,212	15.3
1,500-2,000	46,308	22.7
1,000-1,500	51,408	25.2
500-1,000	18,360	9.0
0- 500	7,344	3.6
Total	204,000	100.0

Source: *Census of Canada, 1941.* Figures specially extracted for this study by the Dominion Bureau of Statistics.

TABLE XIV

ESTIMATED DISTRIBUTION OF INCOME-TAX PAYERS, ONTARIO, 1946	
Annual Income \$	Percentage of Taxpayers
6,000 and over	7.7
5,000-6,000	2.4
4,000-5,000	6.7
3,000-4,000	15.8
2,500-3,000	8.3
2,000-2,500	16.9
1,500-2,000	17.4
1,000-1,500	16.1
Below 1,000	8.7
	100.0

Source: Derived from figures supplied by the Department of National Revenue, Taxation Division, July, 1947.

TABLE XV

RENT CAPACITY OF FAMILIES IN THE TORONTO METROPOLITAN AREA, 1941

<i>Monthly Income</i>	<i>Amount Available for Rent*</i>	<i>Percentage of All Families</i>
\$	\$	
500.00 and over	100.00 and over	2.0
416.66-500.00	83.33-100.00	1.4
333.33-416.66	66.66- 88.33	3.2
250.00-333.33	50.00- 66.66	9.0
208.33-250.00	41.66- 50.00	8.6
166.66-208.33	33.33- 41.66	15.3
125.00-166.66	25.00- 33.33	22.7
83.33-125.00	16.66- 25.00	25.2
41.66- 83.33	8.33- 16.66	9.0
0 - 41.66	0 - 8.33	3.6
		100.0

* "Amount Available for Rent" is based on the assumption that 20 per cent of income is available to pay for housing accommodation.

Source: *Census of Canada, 1941*. Figures specially extracted for this study by the Dominion Bureau of Statistics.

TABLE XVI

RENTS PAID BY LOW-INCOME FAMILIES COMPARED WITH THEORETICAL CAPACITY, 1941

<i>Metropolitan Areas</i>	<i>Average Rent Paid by All Low Income Families</i>	<i>Rent Capacity (20% of Income)</i>	<i>Deviation of Actual Rent from Proportionate Rent</i>
	\$	\$	\$
Toronto	25	13.77	11.23
Halifax	18	12.25	5.75
Saint John	14	9.65	4.35
Quebec	17	10.20	6.80
Montreal	17	10.87	6.13
Ottawa	19	12.67	6.33
Hamilton	21	14.43	6.57
London	20	12.92	7.08
Windsor	21	15.72	5.28
Winnipeg	18	10.23	7.77
Vancouver	18	9.57	8.43
Victoria	19	11.68	7.32
Averages of twelve Metropolitan areas	\$19	\$11.72	\$7.28

Source: Advisory Committee on Reconstruction, Report IV, *Housing and Community Planning* (Ottawa, March, 1944).

TABLE XVII

RENTS PAID BY MIDDLE-INCOME FAMILIES COMPARED WITH THEORETICAL CAPACITY, 1941

Metropolitan Areas	Average Rent Paid by Middle Income Families	Rent Capacity (20% of Income)	Deviation of Actual Rent from Proportionate Rent
	\$	\$	\$
Toronto	29	25.82	3.18
Halifax	26	22.85	3.15
Saint John	18	19.48	1.48
Quebec	22	20.47	1.53
Montreal	21	22.05	1.05
Ottawa	28	25.97	2.03
Hamilton	25	24.70	0.30
London	25	22.65	2.35
Windsor	24	27.78	3.78
Winnipeg	26	22.57	3.43
Vancouver	22	21.45	0.55
Victoria	22	21.57	0.43
Averages of twelve Metropolitan areas	\$24	\$23.15	\$0.85

Source: Advisory Committee on Reconstruction, *Housing and Community Planning*.

TABLE XVIII

MONTHLY RENTS PAID, IN RELATION TO SIZE OF FAMILY, 1941
TORONTO CITY, SUBURBAN AREA, AND WHOLE METROPOLITAN AREA

			Average Rent Paid in the	
			Fringe Area	Metropolitan Area
			\$	\$
In the \$1,500-\$2,000 income group				
Families with no children			35	34
" " 2 "			32	28
" " 4 "			28	26
In the \$1,000-\$1,500 income group				
Families with no children			31	28
" " 2 "			28	23
" " 4 "			26	21
In the \$500-\$1,000 income group				
Families with no children			29	25
" " 2 "			26	20
" " 4 "			24	20

Source: *Census of Canada, 1941*. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

TABLE XIX

PERCENTAGES OF TENANT FAMILIES PAYING MORE THAN PROPORTIONATE RENT, AT THREE INCOME LEVELS AND THREE FAMILY SIZES, TORONTO AREA

Percentage Paying More Than 20% of Income Metropolitan			
	City %	Fringe %	Area %
\$1,500-\$2,000 income group			
With no children	74.4	69.1	72.5
" 2 "	57.7	38.2	52.2
" 4 "	36.6	32.7	35.6
\$1,000-\$1,500 income group			
With no children	88.0	73.7	83.9
" 2 "	80.2	68.8	73.4
" 4 "	73.5	45.5	64.3
\$500-\$1,000 income group			
With no children	86.2	87.1	86.5
" 2 "	96.2	80.4	91.6
" 4 "	98.4	83.3	94.2

Source: *Census of Canada, 1941*. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

TABLE XX

MONTHLY BUDGET FOR FAMILY OF FIVE IN TORONTO (MAN, WOMAN,
BOY 6, GIRL 10, BOY 12)

<i>Item</i>	1939	1944	<i>Cost</i> <i>May, 1947</i>
RENT	\$25.00	\$30.00	\$33.00
FOOD			
Man	\$13.00	\$14.79	
Woman	11.60	13.24	
Boy 6	7.60	8.90	
Girl 10	10.55	12.69	
Boy 12	10.55	12.69	
	34.40	53.30	62.31
CLOTHING			
Man	6.40	7.72	
Woman	6.00	6.94	
Boy 6	3.05	3.46	
Girl 10	4.15	4.94	
Boy 12	4.50	5.22	
	19.18	24.10	28.28
OPERATION			
Coal	7.75	8.92	
Gas	2.70	2.90	
Light	1.08	1.08	
Water	.90	.90	
Ice	1.00	1.00	
Cleaning supplies	1.50	1.75	
Replacements	2.50	3.00	
Carfare	3.50	3.50	
	22.00	20.93	23.05
ADVANCEMENT AND RECREATION	6.00	11.50	11.50
MEDICAL AND DENTAL CARE	7.45	9.00	9.00
SAVINGS AND INSURANCE	7.91	5.34	5.34
TOTAL PER MONTH	\$121.94	\$154.17	\$172.48
TOTAL PER WEEK	\$ 28.35	\$ 35.85	\$ 40.11

Source: Community Chest of Greater Toronto, Research Department.

TABLE XXI

NET FAMILY INCOMES AFTER DEDUCTION OF INCOME TAX AND ADDITION
OF FAMILY ALLOWANCES

<i>Gross Income</i>	<i>No Children</i>	<i>One Child</i>	<i>Two Children</i>	<i>Three Children</i>	<i>Four Children</i>	<i>Five Children</i>
\$3,000	2,639	2,707	2,784	2,866	2,943	3,016
\$2,750	2,463	2,530	2,608	2,691	2,769	2,847
\$2,500	2,278	2,347	2,424	2,506	2,583	2,657
\$2,400	2,209	2,276	2,354	2,438	2,516	2,594
\$2,300	2,138	2,204	2,282	2,368	2,447	2,527
\$2,200	2,062	2,128	2,206	2,291	2,370	2,449
\$2,100	1,985	2,052	2,130	2,215	2,293	2,372
\$2,000	1,909	1,976	2,054	2,138	2,216	2,294
\$1,900	1,833	1,900	1,978	2,061	2,140	2,215
\$1,800	1,755	1,823	1,901	1,983	2,060	2,135
\$1,700	1,671	1,741	1,817	1,897	1,973	2,044
\$1,600	1,592	1,662	1,739	1,818	1,894	1,959
\$1,500	1,500	1,574	1,649	1,723	1,797	1,859
\$1,400	1,400	1,474	1,549	1,623	1,697	1,759
\$1,300	1,300	1,374	1,449	1,523	1,597	1,659
\$1,200	1,200	1,274	1,349	1,423	1,497	1,559
\$1,100	1,100	1,174	1,249	1,323	1,397	1,459
\$1,000	1,000	1,074	1,149	1,223	1,297	1,359
\$ 900	900	974	1,049	1,123	1,197	1,259
\$ 800	800	874	949	1,023	1,097	1,159
\$ 700	700	774	849	923	997	1,059

Income tax adjustments have been made on the basis of the tax applicable in 1947 for the payment of 1946 taxes.

TABLE XXII

NET MONTHLY RENT CAPACITY AS ONE-FIFTH OF NET INCOME, STANDARD
OF LIVING MARGIN, AND RESIDUAL RENT CAPACITY
PROPORTIONATE RENT PER SIZE OF FAMILY

Gross Income	No Children	One Child	Two Children	Three Children	Four Children	Five Children
\$	\$	\$	\$	\$	\$	\$
3,000	44	45	46	47	49	50
2,750	41	42	43	45	46	47
2,500	38	39	40	42	43	44 (37)
2,400	37	38	39	41	42	43 (33)
2,300	36	37	38	39	41	42 (28)
2,200	34	35	37	38	40 (36)	41 (21)
2,100	33	34	36	37	38 (30)	40 (15)
2,000	32	33	34	36	37 (24)	38 (8)
1,900	31	32	33	34 (33)	36 (17)	37 (1)
1,800	29	30	32	33 (25)	34 (10)	36 (0)
1,700	28	29	30	32 (19)	33 (3)	34 —
1,600	27	28	29 (28)	30 (12)	32 (0)	33 —
1,500	25	26	27 (20)	29 (4)	30 —	31 —
1,400	23	25	26 (12)	27 (0)	28 —	29 —
1,300	22	23 (17)	24 (4)	25 —	27 —	28 —
1,200	20	21 (9)	22 (0)	24 —	25 —	26 —
1,100	18	20 (0)	21 —	22 —	23 —	24 —
1,000	17 (9)	18 (0)	19 —	20 —	22 —	23 —
900	15 (1)	16 —	17 —	19 —	20 —	21 —
800	13 (0)	15 —	16 —	17 —	18 —	19 —
700	12 —	13 —	14 —	15 —	17 —	18 —

The heavy stepped-line represents the minimum income levels at which families of various sizes are able to pay one-fifth of income for rent and also meet the 1947 costs of maintaining the standard of living defined by the Toronto Welfare Council.

The figures in brackets below the standard line represent the monthly income remaining after all costs of living except rent have been paid.

See Table XXI, preceding, for net family incomes.

TABLE XXIII

TORONTO METROPOLITAN FAMILIES: PERCENTAGE FREQUENCY BY INCOME AND FAMILY SIZE

INCOME LEVELS	SIZE OF FAMILY							
	Two Mem- bers	Three Mem- bers	Four Mem- bers	Five Mem- bers	Six Mem- bers	Seven Mem- bers	Eight Mem- bers	
	%	%	%	%	%	%	%	
\$6,000	.18	.39	.68	.43	.25	.07	.03	
\$5,000-5,999	.17	.22	.37	.36	.19	.08	.02	
\$4,000-4,999	.47	.64	.76	.55	.32	.17	.26	
\$3,000-3,999	1.46	2.09	2.36	1.66	.81	.28	.31	
\$2,500-2,999	1.45	2.22	2.34	1.22	.72	.42	.25	
\$2,000-2,499	2.99	4.62	3.75	1.93	1.16	.44	.38	
\$1,500-1,999	5.60	6.33	5.37	2.83	1.47	.54	.63	
\$1,000-1,499	6.83	6.80	6.16	2.87	1.74	.63	.67	
\$500- 999	2.30	2.32	2.03	.95	.62	.43	.30	
\$000- 499	1.00	.83	.70	.39	.32	.17	.17	

Source: *Census of Canada, 1941*. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

TABLE XXIV

DISTRIBUTION OF TORONTO METROPOLITAN FAMILIES ON THE BASIS OF A TOTAL OF 200,000 FAMILIES

INCOME LEVELS	SIZE OF FAMILY							
	Two Mem- bers	Three Mem- bers	Four Mem- bers	Five Mem- bers	Six Mem- bers	Seven Mem- bers	Eight Mem- bers	
	360	780	1,360	860	500	140	60	
\$6,000	360	780	1,360	860	500	140	60	
\$5,000-5,999	340	440	740	720	380	160	40	
\$4,000-4,999	940	1,280	1,520	1,100	640	340	520	
\$3,000-3,999	2,920	4,180	4,720	3,320	1,620	560	620	
\$2,500-2,999	2,900	4,440	4,680	2,440	1,440	840	500	
\$2,000-2,499	5,980	9,240	7,500	3,860	2,320	880	760	
\$1,500-1,999	11,200	12,660	10,740	5,660	2,940	1,080	1,260	
\$1,000-1,499	12,660	13,600	12,320	5,740	3,480	1,260	1,340	
\$500- 999	4,600	4,640	4,060	1,900	1,240	860	600	
\$000- 499	2,000	1,660	1,400	780	640	340	340	

Source: *Census of Canada, 1941*. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

TABLE XXV

INDICES OF NATIONAL INCOME, BUILDING COSTS, AND VOLUME OF
RESIDENTIAL CONSTRUCTION, CANADA, 1919 TO 1941
(1926 = 100)

	<i>National Income (1)</i>	<i>Building Costs (2)</i>	<i>Volume of Residential Construction (3)</i>
1919	84.7	116.2	36.8
1920	102.	123.2	40.6
1921	77.8	110.	63.6
1922	81.4	101.1	93.5
1923	85.3	103.8	85.8
1924	85.8	102.2	80.9
1925	94.	100.8	86.6
1926	100.	100.0	100.0
1927	105.2	94.5	120.3
1928	116.9	103.	122.7
1929	117.0	107.5	109.1
1930	98.8	105.4	80.2
1931	79.4	98.9	75.4
1932	62.4	91.3	28.9
1933	60.4	85.6	25.5
1934	69.8	86.5	32.6
1935	74.8	87.5	37.4
1936	85.	89.7	43.6
1937	96.9	95.3	53.4
1938	95.1	94.1	53.1
1939	101.4	94.8	64.3
1940	119.6	98.8	62.6
1941	142.5	107.3	77.9

Sources:

- (1) *Canada Year Book, 1945.*
- (2) Based on indices of construction labour wage rates from *Wages and Hours of Labour in Canada, 1946*, Department of Labour, and on indices of building materials' prices, from figures published by the Prices Branch, Dominion Bureau of Statistics.
- (3) Based on figures for residential construction in urban areas from *Housing and Community Planning*, p. 32.

TABLE XXVI

 EXAMPLES OF RENT SYSTEMS USED BY LOCAL HOUSING AUTHORITIES IN THE
 UNITED STATES

CHICAGO HOUSING AUTHORITY

<i>Yearly Family Income</i>	<i>2 Rooms</i>	<i>3 Rooms</i>	<i>4 Rooms</i>	<i>5 Rooms</i>
Under \$900	\$15	\$15	\$16	\$17
From \$900 to \$1,200	20	20	21	22
\$1,200 to \$1,500	25	25	26	27
\$1,500 to \$1,800	30	30	31	32
\$1,800 to \$2,100	30	35	36	37
\$2,100 to \$2,400	30	35	41	42
\$2,400 to \$2,700	30	35	45	47
\$2,700 to \$3,000	30	35	45	47

HOUSING AUTHORITY OF CITY OF NEWARK, N.J.

Annual Income Limits and Rent Schedule

<i>2 Persons</i>	<i>3-4 Persons</i>	<i>5 or More Persons</i>	<i>Monthly Rent (Including Utilities)</i>
A Up to \$800	Up to \$900	Up to \$1,000	\$19
B \$ 801-\$1,000	\$ 901-\$1,125	\$1,000-\$1,250	\$22
C \$1,000-\$1,250	\$1,126-\$1,350	\$1,251-\$1,450	\$25
D \$1,251-\$1,350	\$1,351-\$1,450	\$1,451-\$1,550	\$28
X \$1,351-\$1,450	\$1,451-\$1,550	\$1,551-\$1,650	\$32*
<i>Admission Limits:</i>			
\$1,451-\$1,800		\$1,551-\$2,000	\$1,651-\$2,200

*Rents for families whose incomes at admission, or at the time of the annual re-examination for continued occupancy are above those in X grade are figured at \$32 plus \$1.00 for each \$50 by which the annual income exceeds the limits in X grade.

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